

JPRS-TTP-91-009
29 NOVEMBER 1991



JPRS Report

DISTRIBUTION STATEMENT A
Approved for public release:
Distribution Unlimited

Telecommunications

DTIC QUALITY INSPECTED 3

REPRODUCED BY
U.S. DEPARTMENT OF COMMERCE
NATIONAL TECHNICAL
INFORMATION SERVICE
SPRINGFIELD, VA 22161

19980512 145

Telecommunications

JPRS-TTP-91-009

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Latvian TV To Link to European Body

*LD1511114791 Riga Radio Riga International
in English 2130 GMT 14 Nov 91*

[Text] The local television station from the Latvian province of Latgale is the first Baltic regional television station to join forces with the European Association of Regional and Local Television. This organization is a division of the European Parliament, which has promised both material and financial aid, as well as a staff placement program in Europe for Latgalean television.

Australia, Vietnam To Cooperate in Communications

*BK2011154191 Hanoi VNA in English 1452 GMT
20 Nov 91*

[Text] Hanoi VNA Nov. 20—Vietnam and Australia have agreed in principle to cooperate in communications, transport and post.

In a contract signed here yesterday between the Kinhill Engineers of Australia and the Corporation for Consultative Services for Investment and International Cooperation for Communications, Transport and Post (INTECO), of Vietnam, the two sides agreed to provide consultative services, technologies and Vietnamese labour to build communication and transport facilities with financial assistance, in aid and loan, from the Australian Government.

The signing ceremony was witnessed by Minister of Communications, Transport and Post Bui Danh Luu, General Director Luu Minh Hieu and Australian Minister for Trade and Overseas Development Neal Blewett.

BBC Official on Plan for Broadcasting From Moscow

*LD2011213291 Moscow Central Television First
Program Network in Russian 0430 GMT 19 Nov 91*

[Studio interview with Alexander Levich, head of BBC Russian service, by program presenter Mikhail Osokin on 19 November in Moscow; from the "Utro" program]

[Text] [Osokin] Alexander Levich, one of the heads of the BBC Russian service, is our guest today. True, he is only in Moscow on a visit, so to speak, but in essence his section intends to give itself a quite serious base here. The fact is that the BBC is starting direct broadcasting on our Russian airwaves for the first time. So I will ask Alexander to tell us more details about this project.

[Levich] This is a quite interesting matter, of course. A Western radio station broadcasting in Russian will be going out live on air here for the first time.

[Osokin] This will be a live relay from London with the signal (?being transmitted)?

[Levich] Yes, the signal comes from London to a satellite, it is picked up on a dish here, and from the dish special decoding equipment puts it out directly on local....

[Osokin, interrupting] On the medium waves, yes? This will be the news?

[Levich] On medium waves.

[Osokin] When do you plan to begin broadcasting?

[Levich] From 1 February, or sooner if our technical people can get the equipment delivered more quickly.

[Osokin] What do you plan to broadcast?

[Levich] We will have a special program for Radio Rossii listeners. A Radio Rossii staff member will be with us in London on a permanent basis for several months; they will take turns, and he will be directly involved in working on this program. His participation is very important for us as well, of course, because this will be a special current affairs program that will include news and some comment, and commentaries on events of the week.

[Osokin] From what you say, I understand that this is the first time we have seen such a practice here. Do you do similar things in other countries? With live transmissions on a country's airwaves?

[Levich] Yes, Mikhail, we do this in virtually all the countries of Eastern Europe; we also do it in many countries in Western Europe. We have such a program in Poland, for instance; the Polish central radio service picks up our signal and every evening for an hour, or two—I don't recall—it is transmitted live in Poland. We have the same thing in Czechoslovakia and Hungary, and a similar agreement has been signed in Bulgaria, too, as far as I recall.

[Osokin] As I understand it, you view the planned broadcasts by your radio station live on the Russian airwaves as just the first step. What else do you plan?

[Levich] We are now having serious negotiations here in Moscow for our English broadcasts, that is, the World Service, but in English, that is, to have the signal on medium waves, which would allow many Muscovites and residents of Moscow oblast—for the time being to begin with—to listen to our World Service in English, live with good reception.

[Osokin] An interesting point: Are you ready, in turn, to accept our broadcasts in English on your airwaves?

[Levich] This is a very complicated question. The fact of the matter is that in our country the BBC as such does not have the right to allocate frequencies. For some reason this is done by the Home Office in our country. So, since the situation is somewhat different and everything here has somehow been concentrated in the hands of Gosteleradio, it was much easier to avoid this difficulty. In Great Britain, strange as it may seem, the situation concerning this matter is more complicated.

[Osokin] It's clear that you cannot answer that question. Today, as it happens, I was saying that literally a few days ago Russian President Yeltsin, Moscow's Mayor Popov, and St. Petersburg's Mayor Sobchak had expressed serious dissatisfaction at broadcasts by Radio Liberty. They even sent a special protest message saying that Liberty was not giving proper coverage to events in the country. Have you no apprehensions with regard to similar comments about yourselves?

[Levich] I hope not. The fact is that the BBC has always been distinguished from many other radio stations, I would hope, by its editorial approach and its standpoint. The fact of the matter is that the BBC has always striven first to provide a balanced approach to any problem, and second, to provide an objective approach to any problem. In addition, there is one very substantial element: The BBC is the British radio broadcasting corporation, to put it bluntly. It is not an emigree radio station, and we strive to avoid the situation where people can give personal opinions and positions on the BBC's airwaves.

[Osokin] My final question: The influence and the influx of the U.S. mass media has been noticeable of late in the Soviet Union. A lot of films are appearing, there are many programs, and so on. Can I assume that they are somewhat

concerned about this in London, and that the BBC's increased activity on our information market is also connected with this?

[Levich] Mikhail, this problem exists in Great Britain, too. U.S. productions very often appear on cinema and television screens—U.S. mass production, if I can call it that. This problem is of concern to many people in Great Britain as well, because it is considered that sometimes these productions are not of high enough quality. We console ourselves with the hope that the material that the BBC produces avoids this lowering of our production standards.

[Osokin] Thank you, Alexander.

[Levich] Thank you, Mikhail.

ANGOLA

Council Approves Private Commerical Radio Stations

*MB2011134391 Luanda Radio Nacional Network
in Portuguese 0600 GMT 20 Nov 91*

[Excerpt] The Standing Commission of the Council of Ministers has approved a decree on the granting of licenses for private commercial radio stations. Under the terms of the document approved yesterday, Angolan radio professionals will be given priority. The permits can also be issued to cooperatives, corporations, and to individuals. [passage omitted]

BOTSWANA

New Communication Facility Opened in Letlhakane

*MB2511183791 Gaborone Radio Botswana Network
in English 1910 GMT 24 Nov 91*

[Text] The director of the Department of Information and Broadcasting, Mr. Pat Makgekenene, has spelled out various developments his department will undertake during the NDP [National Development Program]-7.

Speaking at the official opening of the new Letlhakane information and broadcasting offices yesterday, Mr. Makgekenene said more relay stations are to be built in the Francistown and Boteti areas. He said the relay stations will improve Radio Botswana reception in these area.

Mr. Makgekenene also explained that during the planned period, pages of the BOTSWANA DAILY NEWS will be increased, and called on the community to provide the department with enough news. He disclosed that from 2 December this year, Radio Botswana will close down at 12 o'clock midnight [2200 GMT]. He said during the same period the radio station will introduce news briefs at 10 o'clock in the morning [0800 GMT], 4 o'clock in the afternoon [1400 GMT] and 10 o'clock in the evening [2000 GMT]. Mr. Makgekenene called on the Boteti residents to visit and utilize the offices and not let them become a white elephant.

For his part the Letlhakane Subordinate Tribal Authority, Mr. Baruntshe Kegapetswe, appreciated the efforts by the government to improve communication facilities in the Department of Information and Broadcasting. He said with the completion of the offices, news from the area will be heard over the radio and printed in the BOTSWANA DAILY NEWS.

IVORY COAST

National Radio To Begin Nonstop Transmissions

*AB1211101091 Abidjan FRATERNITE MATIN
in French 9-10 Nov 91 pp 4, 5*

[Excerpt] Two major innovations will, beginning Monday, 11 November, mark Ivory Coast radio [Radio Cote d'Ivoire]. A new channel—Frequency Two—will come into existence. It will be, essentially, an entertainment and topical channel which will also devote much time to sports, games, leisure, and phone-in programs. Transmission will

begin at 0500 and will be nonstop, if only the technical equipment can sustain the will and determination shown by management and employees of the radio station.

In fact, by deciding to transmit 24 hours a day, Radio Cote d'Ivoire, which functions with old equipment and which, moreover, depends on the present broadcasting network with its faults, knows that the technical directorate will redouble their engineering capacity to maintain the equipment and to relay the networks smoothly. Although this aspect constitutes a real source of concern, there is enthusiasm nevertheless. Ouattara Gnonzie, director of the radio, even feels that with the present installations, Channel Two can cover four-fifths of the country.

Radio Cote d'Ivoire will henceforth serve 88 hours worth of programs a week. The first channel will broadcast from 0500 to midnight. From 0500 to 0800 both channels will broadcast in parallel but from 0800 the two channels will run separate programs. The first channel will broadcast until midnight, while the second channel will continue until 0500 when the two channels will again link up.

Listeners will be treated to a good dose of intensive newscasts in the morning segment. There will be four newscasts instead of the current three. The first newscast will be at 0530. Furthermore, there will be news flashes every 30 minutes. There is also a change in the evening newscast, the first of which is slated for 1900 instead of 1930. [passage omitted]

LIBERIA

Businessman Ready To Help Revitalize Television

*AB2311111591 Monrovia Radio ELBC in English
0900 GMT 20 Nov 91*

[Text] A Nigerian businessman, Prince Arthur Ize, was in Liberia to explore possibilities of revitalizing the television station, also improving the radio services of the Liberia Broadcasting System [LBS].

Prince Ize, who arrived on Monday [18 November], told Interim President Amos Sawyer during a meeting at the Ducor [Hotel] that he was willing to assist in having the television station revitalized and the radio services augmented.

He, however, said that considering the damages done to the television station, it was not feasible to have it repaired in a short time but added that efforts could be exerted to relocate the television station and have it operational within three months.

Prince Ize said his visit here was in response to a request by the management of the LBS. He informed President Sawyer that he had already toured LBS facilities in Paynesville.

NIGERIA

African Leaders Called On To Salvage PANA

*AB0911210391 Lagos Radio Nigeria Network
in English 1500 GMT 8 Nov 91*

[Text] Nigeria has called on African leaders to take necessary steps to ensure the survival of the PAN-AFRICAN

NEWS AGENCY [PANA]. The minister of information, Chief Alex Akinyele, said in Dakar, Senegal that PANA had lost nine of its top members of staff due to lack of funds. He was speaking with diplomatic correspondent, Joseph Ozoro, after a visit to the headquarters of the agency in the Senegalese capital.

[Begin recording] [Akinyele] I am horrified by the situation in PANA. First, due to lack of funds, they have lost nine of their top staff, and it is not going to be very easy for them to have them back. I do not believe that any person is indispensable but when you lose nine out of 16 staff of your very reliable work force then you have lost something and some others are more or less on their way out.

Apart from the inability of PANA to pay their staff, PANA has some other problems. Some of the equipment needs to be replaced, some needs to be refurbished. And not only that. PANA is owing most of their clients, especially the telecommunications outfit which they use. So, financially, PANA is in a mess and everything should be done to salvage PANA.

I was not very happy when I saw the whole situation. I feel that if the whole of the African heads of state decided to establish PANA in the year 1979, I think it is [words indistinct] the moral right of our leaders to ensure that they pay their dues to PANA. At least, it is only medium through which Africa can speak to Africa, and nothing should be done to prejudice the survival of PANA. I am not happy about the situation there, I must confess to you.

[Ozoro] Sir, what of this issue of commercializing the organization? Are there steps so far taken in this direction?

[Akinyele] I was thinking in terms of selling the idea of commercialization to the PANA chief executive, but incidentally, they have taken some kind of initiatives towards commercialization. They have started some kind of bulletin which they will send round to embassies and those who will like to buy as hot news. They have started and it is an encouraging development because some nine embassies are taking these news bulletin regularly while some said that in the next year budget they will ensure that they make provision to get these news bulletin regularly from PANA. [end recording]

Information Minister Proposes Privatization of PANA

AB0611145591 Lagos Radio Nigeria Network in English 0600 GMT 6 Nov 91

[Text] The minister of information, Chief Alex Akinyele, who is the chairman of the Conference of African Ministers of Information, has proposed the privatization of the Pan-African News Agency, PANA. Chief Akinyele, who is also the chairman of the Intergovernmental Council on Communications, advised that if PANA should be commercialized, in no circumstances should the shares be sold to countries outside the continent. Diplomatic correspondent, Joseph Azoror, covering the current ECOWAS [Economic Community of West African States] ministers of information meeting in Dakar, reports that Chief Akinyele

made the proposal yesterday while answering questions from newsmen. Chief Akinyele was of the view that some countries could afford to buy the available shares in PANA, stressing that by adhering to those modalities, the organization would still remain an exclusive property of the African Continent.

The minister called on African countries to introduce the use of rediffusion box. This is to ensure effective dissemination of information, especially to the grass roots. Chief Akinyele remarked that African leaders were appreciating the need for effective communications, stressing that it would not be realized without journalists. To this end, the minister appealed to the various media organizations in the continent not to relent in their efforts to ensure that their profession remains absolutely coherent. Chief Akinyele stated that the journalists in the continent owe it as a duty to be more humble, magnanimous, and should forget and serve other African people. [sentence as heard] This, according to the minister would promote economic, political, peace, and unity as well as stability in the continent. [sentence as heard]

Government Ratifies Lome IV Convention

AB0711071091 Paris AFP in English 1643 GMT 6 Nov 91

[Text] Lagos, Nov 6 (AFP)—The Nigerian military government has ratified the Lome-IV convention under which the West African nation will be able to draw from a grant of about 113 million ecu (192 million dollars) to be provided through EC-ACP [African-Caribbean-Pacific] cooperation, a reliable source said here Wednesday.

Under the convention, beside the 113 million ecu grant, Nigeria, which has 16 airports—four of them international—would also be the largest beneficiary of an additional 22 million ecu (37.4 million dollars) to be provided for aeronautical satellite telecommunications project for Central and West African region, the source added.

The project is for the improvement of air traffic safety in Cameroon, Central African Republic, Chad, Congo, Gabon, Ghana, Niger, and Nigeria, said the same source.

The delay in ratifying the convention since Nigeria signed the document in December 1989 was due to bureaucracy, said the source.

Most 46 countries which are members of the African, Caribbean and Pacific [ACP] that have signed the convention in Lome, Togo, on December 15, 1989, have ratified it, the source said. The convention is for a period of 10 years but the financial protocol covers the first five years and is negotiable thereafter, the same source said.

SOUTH AFRICA

Direct Satellite Broadcasts Approved 'in Principle'

MB1811181591 Johannesburg SABC TV 1 Network in English 1600 GMT 18 Nov 91

[Text] Television technology in South Africa is set to change drastically. Viewers can expect to receive direct satellite transmissions as early as 1994. The chairman of

the SABC [South African Broadcasting Corporation] Board, Professor Christo Viljoen, told the conference on broadcasting technology in Pretoria that the board had approved in principle direct satellite transmission. This meant that the signal broadcast by the SABC could be received by the viewer directly from a satellite. The transmitting satellite would be in a stationary position high above the earth. This eliminated the need for a large number of separate transmitters all over the country.

Professor Viljoen said broadcasting via satellite was the most economical way of expanding television services to the entire country as it allowed for total geographical coverage. The system could also be used for other electronic signals, such as telephone communications, and data processing. The necessary receiving and transmitting equipment could be manufactured locally. According to Professor Viljoen this would stimulate technological innovation and create job opportunities.

Telecommunications Construction To 'Accelerate'
HK2111135591 Beijing ZHONGGUO XINWEN SHE
in English 1131 GMT 21 Nov 91

[Text] Beijing, November 21 (CNS)—China is to invest RMB 45 billion [renminbi] to accelerate the construction of posts and telecommunications in the Eighth Five-Year Plan period, according to the Ministry of Posts and Telecommunications. This scale of investment is double that of the previous five years.

The Director of the Planning Department of the Ministry of Posts and Telecommunications, Mr. Liu Liqing, said that investment in posts and telecommunications will be focused on the construction of a long-distance communications network during the Eighth Five-Year Plan period.

According to the Ministry's plan, 16,000 kilometres of long-distance optical fibre cable will be laid and 560,000 long-distance switchboard terminals will be installed. The construction will enable the counties and cities in the eastern, central and western areas to be part of the age of the long-distance automatic telephone system.

In the coming years, the key projects of posts and telecommunications construction will include:

- Twelve public communications satellite and earth stations which will form the country's domestic satellite communications network.
- The construction of a Sino-Japanese submarine optical fibre cable running for over 1,300 kilometres. This project is expected to go into operation in 1992.
- Five big communication optical fibre cable projects including: Beijing-Harbin; Shanghai-Guangzhou; Beijing-Shanghai; Beijing-Guangzhou and Zhengzhou-Chengdu.

The above-mentioned projects, Mr. Liu said, will be finished within the next five years, and with their completion China will derive significant improvements in the field of posts and telecommunications.

Construction of Fiber Optic Network To Quicken
HK2111024691 Beijing CHINA DAILY in English
21 Nov 91 p 1

[Article by Xie Liangjun: "Fibre Optic Revolution for Telecom in China"]

[Text] China is to cooperate with Japan and the United States to speed up construction of its first international submarine cable line in a bid to switch the domestic telecommunications network on to the global system.

Planners with the Ministry of Posts and Telecommunications revealed that the three countries are currently installing a 1,300-kilometre submarine cable between Shanghai and Kyushu in Japan.

The \$64.3 million project, which will link China's telecommunications cable network with the world, is due to be completed in 1993, when Chinese subscribers will have easier access to their overseas counterparts. The government also plans to complete five major fibre optic cables

during the 1991-95 period in an attempt to facilitate long-distance telephone communications. The trunk lines would cost about 2 billion yuan (\$373 million) and link Beijing with China's other major cities.

The 4,200-kilometre Beijing-Shenyang-Harbin line will start construction next year with an investment of up to 600 million yuan (\$112 million), of which about \$50 million in loans is expected from Japan.

Ministry officials said the 2,600-kilometre Southern Coastal Trunk Line was already under construction at a cost of 400 million yuan (\$74.6 million). It will connect Shanghai, Hangzhou, Ningbo, Wenzhou, Fuzhou and Xiamen with Guangzhou and is expected to be completed by the end of 1992.

The Beijing-Tianjin-Jinan-Hefei-Shanghai fibre optic cable, which will cost 300 million yuan (\$56 million), is scheduled to begin construction next year for completion in the first half of 1993. The project will link six provincial capitals.

The Beijing-Hankou-Guangzhou line is expected to be completed in 1995 at a cost of 600 million yuan (\$112 million). The government hopes to attract overseas investment to ease the financial burden of this undertaking.

The State Planning Commission has approved installation of a Zhengzhou-Xian-Chengdu fibre optic cable during the Eighth Five-Year Plan period (1991-95). The government hopes to attract foreign government loans to partially cover the project.

The construction of fibre optic trunk lines and the installation of computerized telephone exchanges is on the top of the government's development agenda.

China started building such cables in the late 1970s. There are now 11,000 kilometres of domestic fibre optic lines. During the 1986-90 period, only one such trunk line, the Wuhan-Nanjing Line, was built.

Apart from major cables funded by the central government, provinces and autonomous regions have been encouraged to install inter- or intra-provincial fibre optic lines to ease logjams on existing local networks or to expand telecom capacity.

Minister on Guangdong Telecommunications Conference

HK2211135791 Guangzhou Guangdong People's Radio Network in Mandarin 0400 GMT 21 Nov 91

[Text] The provincial telecommunications work conference opened in Guangzhou today.

Provincial Vice Governor Zhang Gaoli made a report in which he reviewed our provincial telecommunications work in the Seventh Five-Year Plan and set out our provincial telecommunications work development tasks in the Eighth Five-Year Plan.

Yang Taifang, state posts and telecommunications minister, also spoke highly of Guangdong's posts and telecommunications development and praised Guangdong's posts and telecommunications undertakings for their rapid growth

and outstanding achievements as well as for their taking the lead in and setting a fine example for the whole country.

Zhang Gaoli pointed out at the conference: During the Seventh Five-Year Plan, Guangdong's per capita posts and telecommunications business volume registered a 37.2-percent increase. Guangdong also further raised the scientific and technological standard of its telecommunications networks and continually enlarged its telecommunications service scope.

Zhang Gaoli called on governments as well as posts and telecommunications departments at all levels to firmly grasp each and every opportunity for posts and telecommunications development in the Eighth Five-Year Plan, adhere to the principle of quick speed, high starting point, and harmonious development, foster a preliminary telecommunications scale in keeping with Guangdong's economic and social development, and basically establish a large modern telecommunications network with comparatively strong adaptability.

Yang Taifang, state posts and telecommunications minister, summed up Guangdong's posts and telecommunications development experiences into the following points:

- To obtain local support;
- To obtain both local support and state support;
- To expand investment channels;
- To bravely shoulder management responsibilities;
- To suit measures to local conditions;
- To conduct phased construction;
- To promote technological advance;
- To raise technical standard of telecommunications networks;
- To seek upper-management efficiency.

Ministry Announces More Phones To Be Installed

*OW2611133091 Beijing XINHUA in English
1239 GMT 26 Nov 91*

[Text] Beijing, November 26 (XINHUA)—China plans to install another 15 million switchboards and open an additional 150,000 toll circuits in the coming five years, a senior official from the Chinese Ministry of Posts and Telecommunications said today.

Addressing the opening ceremony of an international telecommunication exhibition which opened here, Yang Xianzu, vice minister of posts and telecommunications, said that China's total number of phones will be 33.6 million by the year 2000, eight times as many as in 1980. That would be one telephone per four urban residents.

As of 1990, China's switchboards had a capacity of 20.45 million, with 12.74 million telephones in operation.

In the coming decade, Yang said, China will concentrate on the construction of a program-controlled national network formed by a long distance digital trunk with optical fiber and digital microwave. This will enable 98 percent of Chinese counties to operate with the automatic local telephone service and 60 percent of them will be installed with IDD [international direct dial].

At present, the construction of 2,800 kms of optical cable running from Nanjing to Guangzhou is in full swing. The cable is expected to add 23,000 toll circuits upon completion in two years.

The exhibition, which will last for six days at the China International Exhibition Center, displays the latest-developed telecommunication and automatic office equipment from more than 120 enterprises of Canada, Denmark, France, Germany, Japan, Britain, the United States, and Switzerland, as well as China's Mainland, Taiwan, and Hong Kong.

New Radio System Adopts Satellite Technology

*OW1711020291 Beijing XINHUA in English 0127
GMT 17 Nov 91*

[Text] Beijing, November 17 (XINHUA)—China has successfully developed a new system of radio communication by adopting satellite technique.

The new system named "point-to-multiple-points radio communication system" is one of the key state technological projects in China's Eighth Five-Year Plan (1991-95). It was jointly developed by Qinghua University, the Shandong Radio Factory, and the Jinan Radio Factory.

The "point-to-multiple-points radio communication system" has combined multiple access satellite technology with computerized network technology so as to form a telecommunications network for radio digital telephone, telex and low-speed data transmission.

The capacity of the new radio communication system is up to 10,000 lines for digital telephone, doubling that of similar systems developed abroad at 30 percent of the cost. Communication experts said that the average charge for a subscriber is even lower than for the wire telephone.

Chinese experts said that the new system has a large market in China since it is suitable for its vast rural areas, islands, mining areas, and remote and border regions.

Shanghai Builds Satellite Earth Station

*OW1711020891 Shanghai People's Radio Network in
Mandarin 2300 GMT 15 Nov 91*

[Article by station correspondent Bao Wenjun and reporter Ma Chongfei; from the "Morning News" program]

[Text] Construction of Shanghai's Indian Ocean satellite earth station was started yesterday. The project is expected to be completed and the station put into operation by the end of June 1992. This is the second ground receiving station for satellite communications constructed by Shanghai following the construction of the Pacific Ocean satellite earth station. Total investment for the Indian Ocean satellite earth station project is 28.6 million yuan. The station's large paraboloid, which has a 20-meter diameter, was provided by the No.39 Research Center of the Ministry of Machine-Building and Electronics Industry and its electronics equipment is imported from a U.S. firm, SPS Company.

Upon completion of the project, Shanghai will be able to set up a direct satellite circuit with various European and Southeast Asian nations and open up international communications businesses concerning telephone, facsimile, and data. Shanghai's existing Pacific Ocean satellite earth station is only able to link up with Southeast Asian and North American regions.

Hunan Boosts Telephone Capacity

OW1711020991 Beijing XINHUA in English
0140 GMT 17 Nov 91

[Text] Changsha, November 17 (XINHUA)—Central China's Hunan Province increased its urban telephone capacity by 81,800 lines and its long-distance capacity by 2,310 lines in the first nine months of this year.

The added capacity equals the province's total increased capacity during the entire Seventh Five-Year Plan period (1986-90).

As part of the effort to enhance telecommunications, Hunan devoted great attention to the development of program-controlled telephones. The province's three major cities—Changde, Chenzhou and Yueyang—installed over 17,000 program-controlled telephones in urban areas, and 1,260 long-distance lines by the end of June this year.

The telecommunications administration in Changsha, the provincial capital, updated 8,756 urban and 540 long-distance lines during the first nine months of the year.

In addition, more than 93,000 telephones, other than program-controlled systems, have been put into operation.

Journal on Carrier Rocket Development

HK1411070391 Hong Kong LIAOWANG OVERSEAS
EDITION in Chinese No 43, 28 Oct 91 pp 7-9

[Article by Yi Yao [2496 2641]: "PRC Carrier Rockets Develop by Leaps, Bounds"]

[Text] China's astronautical industry was established in the mid-1950's. Through its own efforts and after undergoing a lot of hardships, China has finally succeeded in developing its own carrier rocket technology and is ranked among the world's advanced countries in this field. At present, on this land where human beings had their first dream of "flying in the sky," long swords are pointing to the sky and attract the attention of the entire world.

I.

The establishment of New China's first missile and rocket research institution in October 1956, opened the curtain on the development of carrier rocket technology. At that time, the principle guiding scientific research in this field was: "Rely mainly on our own efforts, strive for foreign assistance, and utilize the scientific results already achieved by capitalist countries." This principle gave expression to the heroic spirit of the Chinese nation, and its determination to stand on its own feet among all the nations of the world.

The first step was hard to take. The limited assistance obtained from the Soviet Union only paved a small section

of path for China's astronautical industry, which was then just a toddler. China's objective was to learn how to design its own rockets but first through imitation. In order to master this brand new and totally unknown technology, China made unremitting efforts to "climb the hill." The people dug deep into the ground on the site to achieve the required height; fulfilled complicated theoretical calculations using slide rules and handheld computers; and mastered new techniques, one after another, in the spirit of ants gnawing at a bone. As a result, in November 1960, only three months after the Soviet experts withdrew, China-made rockets successfully rose high into the sky from China's horizon. The success in making this model marked a turn in the development process of China's rocket technology from imitation to independent design, research, and manufacture.

China made major breakthroughs in the technology for liquid fuelled rockets in the mid-1960's. Through the research and manufacture of Dongfeng [East Wind] rockets, China mastered the methods for drawing up general designs, acquainted itself with the rules for research and manufacture, and tackled major problems emerging during the process of making its own designs.

In the mid-1960's, despite interference from the 10 years of turbulence, China still made major headway in its rocket technology, which served to speed up the development process to a great extent. In October 1966, missiles and atomic bombs were successfully combined. The introduction of guided missiles armed with nuclear weapons was a major turning point and a new page in China's missile history, breaking the nuclear blackmail by the nuclear powers and contributing to world peace.

After that, rockets in the Dongfeng series were successfully developed and manufactured. On this basis, two kinds of carrier rocket, Long March I and II, were also developed. These new models did not follow the road taken by foreign countries but boldly adopted new technologies, especially the latest technological results since the mid-1960's, thus largely narrowing the gap between China and the world's advanced countries.

After the 10-year turbulence, the state granted approval for three key projects: A full range of tests on intercontinental carrier rockets, the undersea launch of a solid-fuel rocket, and the deployment of a geostationary satellite using a Long March III rocket. By 1984, all three key projects were completed satisfactorily. In May 1980, an intercontinental carrier rocket shot into the sky from China's northwestern border areas, landing in a predetermined sea area in the South Pacific Ocean. The advanced levels attained in terms of guidance accuracy and delivery capacity marked another important step in China's efforts to master modern precision science and technology. Two years later, China's first launch of a solid-fuel rocket also proved successful.

Over the past 30 years and more, China's astronautical industry has grown from nothing, to small, to large. Starting by imitating, then designing and finalizing models all by itself, from short- and medium-range rockets to long range

and intercontinental models, and from single-stage to multi-stage rockets, China has fashioned many series of carrier rockets and succeeded in developing strategic and tactical missiles. All this has laid a solid foundation of modern defense for a country which has suffered enough humiliation.

II.

China's Long March carrier rocket series was developed on the basis of its missile series. China's first three-stage rocket, the Long March I, was first launched in April 1970 and carried a Dongfanghong [The East Is Red] I satellite into a predetermined orbit, announcing the beginning of China's space era. Five years later, the successful deployment of China's first recoverable satellite by a Long March II rocket served to declare that China had become the third country in the world to master satellite recovery technology. Soon after, China declared to the world that it had already mastered the technology of using one rocket to launch more than one satellite.

China's efforts to develop carrier rockets featured serialization, which shows in constantly adding improved models to the family of Long March family. Studies on different models are not repeated labor but efforts to adopt new technologies, new materials, and new techniques on a predetermined basis, with the aim of making unceasing breakthroughs in professional technologies in terms of guidance, propellant, structural materials, and telemetry. Long March III is of special significance. This is a three-stage rocket developed on the basis of Long March II with the application of a series of low-temperature technologies. The successful deployment of a geostationary communications satellite into its prescribed orbit in April 1984 enabled China to become the third country in the world to use low-temperature high-capacity propellant engines and the second to use high-altitude secondary ignition technology.

Since the 1970's, China has used 28 homemade rockets to deploy 32 manmade satellites. The Chinese carrier rockets are well known for their stable functions, reliable quality, and high accuracy. They possess the capability of deploying different kinds of satellites, including low-orbital satellites [jin di gui dao wei xing 6602 0966 6510 6670 5898 2502], solar synchronous satellites, and geostationary satellites. In addition, the payloads of Chinese rockets has also increased greatly. The maximum payload of low-orbital satellites is 9,200 kg and that of solar synchronous satellites, over 1,600 kg. The power installations in such rockets have also undergone constant improvement. A single engine has been replaced by four parallel engines and thrust is provided by a rocking [yau bai 2280 2369] engine. As a result, the ground propellant thrust force of the rockets was increased from less than 40 tonnes to 600 tonnes, thus guaranteeing a "high starting point."

III.

The principle of "concentrating all forces, clenching our fists, and making breakthroughs on key issues" and the principle of "serializing basic models" have always run through the development process of China's astronautical industry, ensuring that large numbers of scientific results

can be scored with limited investment. After the three key projects—full range of tests on intercontinental carrier rockets, undersea launch of a solid-fuel rocket, and deployment of a geostationary satellite by Long March III—were completed, China announced its decision to introduce Long March II and III carrier rockets to the international market. People who had "watched from across the sea" immediately approached us to obtain more detailed information and seek opportunities for cooperation, to confirm their previous thoughts on the subject. Within a short period of time, China rapidly expanded its business contacts with foreign countries in the carrier rocket technology field, establishing relations with the world's major satellite manufacturing companies and satellite subscribers, as follows: Three major U.S. satellite manufacturers, Hills [xiu si 0128 2448] Company, the Ford Company, and the space department of the General Electric Company; three major satellite manufacturers in Western Europe, including the Martella [ma te la 7456 3676 2139] Company and MBB [abbreviation published in Roman script—expansion unknown] Company; the French Astronautical Company and British Astronautical Industry Company; and the SPAR [abbreviation published in Roman script—expansion unknown] Company of Canada. At the same time, China also made successful bids for some of the world's satellite-deployment projects, signing contracts with a number of countries and regions, such as Sweden, Australia, and Hong Kong.

In August 1987, China used a Long March II to deploy a recoverable satellite carrying two pieces of experimental microgravitational equipment for the Martella Company of France. This was the first time that China used its own carrier rockets to provide a service for foreign customers. Afterward, China deployed another recoverable satellite using a Long March III rocket in 1988. This time, as well as carrying two pieces of experimental microgravitational equipment for the MBB Company of Federal Germany, China also invited some foreign guests to visit the launch site.

In fact, as early as 1984 when China successfully deployed its first geostationary satellite into its prescribed orbit, Long March III carrier rockets, which had already reached world advanced level, had gained considerable fame within the international community. NASA director, (Bakers) [bei ge si 6296 2706 2448] sent a message of congratulation: "You have every reason to be proud of yourselves for setting up this significant milestone in China's space program, and for the functions possessed by Long March III carrier rockets, because only a small number of countries in the world have reached the technological level displayed in this launch." In January 1988, China signed a service contract with the Asian Satellite [Asiasat] Company to use a Long March III rocket to deploy the Asiasat 1 telecommunications satellite. In 1990, carrying the Asiasat 1, the Long March III rocket rose high in the sky to put the satellite into its predetermined orbit. This marked China's complete success in providing commercial satellite-deploying services for foreign countries.

IV.

After the Chinese Government decided to enter the international market, history provided China with an opportunity to scale new heights in its carrier rocket technology: The world's two most important major deploying vehicles—the space shuttle “Challenger” and the Western European Ariana rocket—failed in turn, causing a crisis in the space industry. It was the right time for us to seize the opportunity! China immediately increased the delivery capacity of Long March rockets by a large margin, and started to develop Long March II strap-on booster [kun bang 2190 4834] rockets. This plan immediately aroused the general interest of the international markets. Customers and satellite subscribers from major satellite-manufacturing countries, such as the United States and Britain, began to approach China, of which the Hills Company of the United States was the most enthusiastic.

With a satellite output accounting for 40 percent of the world's total, Hills possessed the world's most advanced satellite technologies. In November 1988, Hills signed a contract with China's Great Wall Industrial Company to use Long March II strap-on booster rockets to deploy two telecommunications satellites for Australia in 1991 and 1992. The contract itself clearly showed that the reputation and true strength of Chinese carrier rockets had won recognition from the international satellite-deploying market. However, it was stipulated in the contract that one year before deploying the first Australian satellite, an experimental launch should be carried out. If the Chinese side failed to do so or postponed the original plan without proper explanation, the American company could terminate the contract and claim \$1 million compensation. That was to say, the research, manufacture, and trial orbit of the satellite should be successfully fulfilled, all within 18 months. The greater the risk, the more significant it was. After weighing the advantages and disadvantages, China decided that it was worth trying. This was not only a matter of earning foreign exchange but an issue of great significance for us in opening up international markets and doing credit to the country. It was also an issue which had a bearing on China's international image as well as on the reputation of its space technologies. Therefore, everyone in the relevant research institutions was of one mind: “Since we cannot afford to lose face or pay the compensation, we have to fight to win.” The major Long March II strap-on rocket booster systems involved the design, production, and testing of several tens of thousands of small and large components. The task was extremely heavy and arduous. What was more, after a series of new technologies, new materials, and new techniques had been adopted, many technical problems emerged in every link, which needed solutions. As far as realistic conditions were concerned, many instruments and equipment we were using were products of the 1950's and 1960's. In our efforts to solve more than 20 technical problems we relied on, and

gave extraordinary play to, our wisdom, sweat, and superb skills. Take the case of making a rocket model to research structural dynamics. Because the design department did not have a large-scale computer, all calculations had to be done on personal computers with relatively small capacities. An American expert considered it impossible for China to accomplish the high-level calculations needed and, therefore, asked China to give him all the data concerning the rocket and let him carry out the calculation. However, China finally succeeded in solving this technical problem on microcomputers by using the “comprehensive method of model attitude [mo tai 2875 1966].” In the end, the American was convinced after he made the same calculations using the same method.

During those intense days, the testing site was used around the clock and was therefore dubbed “the place where the sun never sets.” The experimental units produced more than 6,000 blueprints and put in over 380,000 hours. Almost half of the total, over 100,000 hours, was fulfilled through overtime.

On 16 June, 1991, a large-scale Long March II strap-on booster rocket, which was created through the painstaking efforts of hundreds of thousands of people, soared to the sky, dragging five red fire-dragons behind it. The test was fulfilled successfully at one attempt. After he watched the launch at Xichang Satellite Launch Site, Smith, a 70-year-old American expert and associate designer of Titan rockets, shook hands with chief designer Wang Dechen [3769 1779 5256] saying: “I apologize to you. You Chinese are marvelous! You have created a miracle!” This was the same Smith who said to the chief designer of China's carrier rockets: “Do you mean you want to launch CZ-2E [as published] in only 18 months? I wonder if you Chinese have taken some opium and are having hallucinations.”

The successful launch of Long March II strap-on booster rockets has pushed China's rocket delivery technology into a new stage.

* * *

China is at last ranked among the world's advanced countries in the field of space technology after advancing, step by step, and climbing up one stage after another. Alongside the acute competition among all economic and technological powers in the space technology field, many countries, including India, have quickened their pace and China's hard-won position faces challenges. Therefore, China has decided to list space technology as one of the key fields of high-technology research and development. In addition to continuously strengthening our national defense capability, China's astronautical industry will put more strength into the main battlefield of national economic construction, vigorously open up international markets, and maintain its leading position in the space technology field.

REGIONAL AFFAIRS

PRC Presents Satellite TV Receiving Station

*BK1611112291 Vientiane KPL in English 0916 GMT
16 Nov 91*

[Text] Vientiane, Nov 16 (KPL)—A ceremony was held here yesterday to hand over a TV receiving station via satellite from China between the representatives of the Lao and Chinese Governments—Minister of External Economic Relations Phao Bounnaphon and Chinese Ambassador to Laos Huang Guocai. With the aid of the Chinese Government, the station can receive and relay TV programmes from China to Lao Television and vice versa.

Witnessing the signing of the hand over of the station was Minister of Information and Culture Mounkeo Olaboun and senior officials concerned from the sides.

TV Cooperation Agreement Signed With Indonesia

*BK1511092891 Kuala Lumpur Voice of Malaysia
in English 0800 GMT 15 Nov 91*

[Text] Radio and Televisyen Malaysia, RTM, and Televisi Republik Indonesia, TVRI, have agreed to further stepped up cooperation. Information Minister Datuk Mohamed Rakhmat and his Indonesian counterpart Harmoko said this had been agreed to in the [words indistinct] of both nations. Speaking at a joint press conference, he said there will be wider use of local programs and more exchange of locally produced programs. They earlier held a meeting and discussed greater bilateral cooperation in the fields of information and broadcasting.

They also agreed to permit RTM and TVRI to use each other's news items without prior permission. Datuk Mohamed is in Jakarta on a three-day working visit. Both Indonesia and Malaysia were aware of the negative influences (?coming) from the advances in television technology and had agreed to cooperate closely to check this trend.

VNA, XINHUA Sign Agreement in Beijing

*BK2211155591 Hanoi VNA in English 1522 GMT
22 Nov 91*

[Text] Hanoi VNA Nov. 22—VIETNAM NEWS AGENCY Director General Do Phuong and XINHUA Director General Mu Qing signed in Beijing on Nov. 20 an agreement on cooperation between the two news agencies.

The agreement includes a supplement on the noncommercial cooperation between the two news agencies in information and photo exchanges, the upgrading of the two-way Hanoi-Beijing communication line and the gradual expansion of the bilateral relations.

Earlier, also in Beijing, Do Phuong and his party were received by Ding Quangen, alternate Politburo member and secretary of the Communist Party of China Central Committee, who warmly welcomed the VNA director general's visit made at the invitation of XINHUA Director General Mu Qing right after the Vietnam-China summit. He expressed his satisfaction at the development of the relations between the two news agencies over the past years and

his hope that VNA and XINHUA would, under the new agreement, strengthen cooperation in many fields to help improve the mutual understanding and friendship between the two peoples.

Also present at the reception were XINHUA Director General Mu Qing and XINHUA Editor-in-Chief Nam Cheng-ching.

While in China, General Director Do Phuong met with a number of Chinese officials and visited Shanghai.

The VNA delegation left Beijing yesterday, concluding its friendship visit to China.

JAPAN

Government To Collect Fees From Radio Wave Users

*OW1811080291 Tokyo KYODO in English 0753 GMT
18 Nov 91*

[Text] Tokyo, Nov. 18 KYODO—The Ministry of Posts and Telecommunications plans to collect about 20 billion yen annually in fees for using radio waves, starting in fiscal 1993, ministry officials said Monday. The plans are based on a ministry estimate that the cost for radio wave administration will total 200 billion in the next 10 years.

The officials said the ministry will submit special legislation establishing the fees to the next Diet session and will start preparations in fiscal 1992 for collection of the fees. They said the fees will be used for computerization of radio wave administration, controls on illegal radio wave uses, and development of technology for better use of radio waves.

Under present plans, 11 billion of the total 20 billion yen will be collected from telecommunications companies such as Nippon Telegraph and Telephone Corp., 4 billion yen from broadcasting companies, and 5 billion yen from electric power and trucking companies, and other private businesses, the officials said. Individual amateur radio operators will be charged 500 yen a year, they said.

The fees will be applied not only to private users but also to public authorities such as police and fire stations, the officials said.

First Resources Satellite Launch Scheduled

*OW2011101491 Tokyo KYODO in English 0916 GMT
20 Nov 91*

[Text] Tokyo, Nov. 20 KYODO—Japan will launch its first earth resources satellite next February 3, the National Space Development Agency (NASDA) said Wednesday.

The Space Activities Commission, the country's top space policy board, approved the plan Wednesday, officials said.

The satellite, known as the Japanese Earth Resources Satellite-1 (Jers-1), is a joint project costing about 50 billion yen between the state-run space agency and the Ministry of International Trade and Industry.

Jers-1, which is 0.9 meter wide, 1.8 meters long, 3.1 meters high, and weighs 1.4 tons, will be launched from the NASDA Tanegashima Space Center in Kagoshima Prefecture, southern Japan.

It will orbit for two years at an altitude of 570 kilometers and observe the earth with synthetic aperture radar and optical sensors capable of taking stereoscopic images.

The radar system uses microwave imaging which can give readings under any weather conditions.

Scientists will use the satellite to analyze data in about 250 fields of research, including the movement of glaciers, tropical forests, and prevailing conditions before and after cases of environmental damage.

High-Definition TV Broadcast Starts 25 Nov

OW2411131691 Tokyo KYODO in English 1302 GMT 24 Nov 91

[Text] Tokyo, Nov. 24 KYODO—A Tokyo-based organization will start the world's first test broadcasting of high-definition television Monday afternoon, association officials said Sunday.

The Japan Broadcasting Corporation (NHK), major private networks and consumer electronics manufacturers have formed the association to promote high-definition television. The association is led by Isamu Yamashita, chairman of East Japan Railway Co., the officials said.

The association is to broadcast about eight hours of high-definition television daily using NHK's BS-3B satellite.

High-definition TV systems produce images with 1,125 lines per frame, while the current Japanese TV system produces images of 525 lines per frame. High-definition television produces an image with great detail and also allows a more rectangular screen than the current system, which is beneficial for movie broadcasting.

As the current market price for a high-definition TV set runs up to 4 million yen, a limited number of them have been installed so far, mostly in public places such as art museums, international conference halls and other large halls.

Major consumer electronics manufacturers aim to cut the price of high-definition TV sets to 1 million yen by 1996 when the Atlanta summer olympic games will be held, the officials said.

EC Readying Demand for Open Aircraft Market

OW2111125291 Tokyo KYODO in English 1222 GMT 21 Nov 91

[Text] Tokyo, Nov. 21 KYODO—The European Community (EC) is expected to demand in a meeting with Japan next week that Japan open its market for civilian aircraft and communications satellites, government sources said Thursday.

The sources said the EC is likely to also demand a market opening for construction and communications services in the fifth Japan-EC ministerial talks scheduled to start in Tokyo on Monday.

The move is coming against the background of the EC's increasing trade deficit with Japan. The deficit reached about 20.5 billion dollars in the last January-September period, surpassing an 18.5 billion dollar deficit recorded during the entire year in 1990.

The EC has already asked Japan to reduce its tariffs on processed farm products, marine products, and leather.

Japanese airlines have bought only 25 aircraft from the Airbus Industrie consortium, owned by European companies, compared with 244 from Boeing Co. and other U.S. companies.

They plan to import 216 aircraft from the United States and 37 from Airbus.

Japanese satellite communications companies, meanwhile, have bought all five of their satellites from the U.S.

The EC is expected to demand that Japan open its construction market to European companies since it allows U.S. companies to take part in 17 construction projects after the bilateral construction market dispute in the 1980s, the sources said.

The dispute was touched off in the 1980s, when the U.S. demanded that Japan allow foreign companies to participate in the new Kansai international airport construction project in Osaka Bay.

Foreign Ministry officials said, meanwhile, the ministry has received word from Brussels that it has "suddenly become difficult" for EC Farm Commissioner Ray Macsharry to come to Tokyo for the meeting because he has to deal with urgent matters concerning the EC's common agricultural policy.

But the officials said the possible absence of Macsharry is unlikely to affect the visit of Frans Andriessen, vice president of the EC Commission and the EC's external relations commissioner.

KDD To Begin International Flight Phone Service

OW2011144091 Tokyo KYODO in English 1144 GMT 20 Nov 91

[Text] Tokyo, Nov. 20 KYODO—KDD, Japan's international telecommunications giant, announced Wednesday it will begin an inflight telephone service on Japan Airlines' Pacific routes from next Monday.

The service will be inaugurated on Flight JA 8163 to Honolulu from New Tokyo International Airport at Narita.

Passengers will be able to make international calls through portable phones on board and the charge will be set equally at 1,350 yen per minute for calls to any part of the world.

There are plans to expand the service to Indian Ocean routes and eventually trans-Atlantic routes, KDD said.

All Nippon Airways, the other major Japanese international carrier, is also considering introducing a similar service.

The Aeronautical Satellite Telephone Service, using Inmarsat satellites, will be valid only for calls originating from the aircraft to the ground and not vice versa.

MALAYSIA

Information Data Receiving Station To Be Set Up *BK1811134891 Kuala Lumpur BERNAMA in English* *0933 GMT 18 Nov 91*

[Text] Kuala Lumpur, Nov 18 (OANA-BERNAMA)—Malaysia may set up an information data receiving station by the time the country's own satellite is put into orbit in 1994.

Malaysian Science, Technology, and Environment Minister Law Hieng Ding said the country would then no longer have to depend on the receiving station in Thailand.

He said the Malaysian Remote Sensing Centre had been asked to come up with a cabinet paper on the cost of setting up such a station.

"If the cabinet finds it useful and cost-worthy, then we will open a tender," he told reporters Monday.

Earlier, Law said the National Science and Technology Intelligence and Information Systems would be set up to facilitate dissemination of information on research in the country.

"Now we are in the process of selecting the consultant and hope that by the end of next year or early 1993, the systems would be set up," he added.

PHILIPPINES

Military Modernizes Telecommunications System *HK2011031891 Manila BUSINESS WORLD* *in English 20 Nov 91 p 12*

[Text] The Armed Forces of the Philippines (AFP) has modernized its communications system making it one of the most extensive telecommunications network in the country. Under its modernization program called "Fore-sight Sierra IV," the system was transformed into digital microwave from analog radios. It uses a 300-channel microwave radio network for Northern Luzon that extends to Baguio and Tuguegarao from Manila. Another 670-channel digital microwave serves the Visayas and the Bicol regions. The reliability of the Manila-Cebu link is enhanced by the 96-channel spur link system employed for AFP units in Mindanao. According to the AFP electronics corps, "complementing the transmission facilities are numerous telephone digital exchanges that allow direct distance dialing capability within the military network." The AFP telecommunications system also provides satellite, tactical communications, data, teletype facilities, facsimile, and video, among others.

SINGAPORE

New Airline Communications Center Opens *BK2211150491 Singapore THE STRAITS TIMES* *in English 22 Nov 91 p 47*

[Text] Societe Internationale De Telecommunications Aeronautique (Sita), which yesterday opened its new \$30-million communications center in Loyang, expects air traffic growth in the Far East to remain buoyant.

The region, because of its continued economic expansion, will be the main contributor to the organization's financial growth this year, said Mr. Bernard Leroy, general manager of (Far East and Pacific), who spoke to reporters after the opening ceremony.

On the other hand, prospects are less bright in the recession-hit North American and European markets.

Commenting on Sita's revenue this year, he said "If this year's growth is 10 per cent, it will be a good one."

Sita provides the international airline industry with services such as ground-to-air data communications, air cargo management and passenger reservations. Its turnover last year amounted to some US\$500 million (S\$825 million).

The \$30-million new investment by Sita is just in building and equipment. It is understood that it has spent a similar amount on sophisticated software. The new centre houses under one roof all of Sita's facilities, previously scattered all over Singapore.

Sita, registered here 30 years ago, also plans to perform more research development (R&D) in Singapore, particularly in systems development for the airline industry. Of its 130 staff here, some 40 engineers and specialists are involved in R&D, said Mr. Leroy.

Economic Development Board managing director Tan Chin Nam, who officiated at the opening ceremony, said Sita's new building supported Singapore's development in the field of information technology.

Founded in 1949, and headquartered in Paris, Sita is the world's largest specialised telecommunications co-operative network, operating in 180 countries. It counts 400 airlines as its members.

Singapore, together with two other centers at Atlanta in the United States and Paris, supervises its entire global network on an eight-hour rotational basis each day.

VIETNAM

Ha Nam Ninh Province Purchases TV Transmitter *BK1511101591 Hanoi Voice of Vietnam Network* *in Vietnamese 1100 GMT 12 Nov 91*

[Excerpt] To improve the quality of radio and television programs, Ha Nam Ninh Province has spent more than 2 billion dong purchasing a new 1,000 watt-capacity television transmitter capable of bringing programs to the entire province. The station has trained or provided supplementary training to nearly 100 collaborators from different parts of the province. [passage omitted]

Kim Boi District TV Relay Station Commissioned

*BK2111140491 Hanoi Vietnam Television Network
in Vietnamese 1200 GMT 15 Nov 91*

[Text] To meet the cultural and spiritual needs of ethnic minority compatriots in Kim Boi District, Hoa Binh Province, with funds allotted by the province and in collaboration with the (Halit) Corporation and the Ministry of Culture, Information, and Sports, the Hoa Binh radio and television station has recently completed the installation of the Kim Boi District television relay station.

As of 12 November 1991, The Kim Boi District television relay station has officially begun its operation with a 21-meter-band transmitter, bringing television programs to ethnic minority people in 10 outlying villages. In addition, the station has broadcast local television programs to help implement political tasks and promote cultural and social activities to benefit the ethnic minority people in Kim Boi District and various villages adjacent to Hoa Binh Province.

Television Relay Station Set Up in Lai Son Island

*BK2211062691 Hanoi Voice of Vietnam Network
in Vietnamese 1430 GMT 18 Nov 91*

[Text] Kien Giang Province just put into service the television relay station in Lai Son Island. This is the third relay station specially set up for people living in the islands after the television relay station in Phu Quoc Island. Kien Giang Province has about 100 islands of different size. The Kien Hai District alone has 73 islands.

At present, apart from the central and provincial television stations, the television stations in Can Tho and Kien Giang have been providing programs to people living in more than 40 islands.

Kien Giang is improving the system of relaying and rebroadcasting television programs for people living in the islands and border areas. The province is also trying to set up more television relay stations to improve the cultural life for people and soldiers living in isolated islands.

POLAND

Radio, TV Chairman on Battle for Broadcast Rights

LD2211090291 Warsaw Radio Warszawa Network
in Polish 1800 GMT 22 Nov 91

[Text] Only five private radio and television stations have permission to transmit programs. Another 10 are operating without permission. The Federation for Supporting Private Radio and TV Stations is acting in their defense. It is demanding that the president, among others, should not sign the law on radio and television. This resolution is justified by the chairman of the Federation, Ireneusz Orzechowski.

[Begin recording] [Orzechowski] We are directing an appeal to the president to create possibilities for the minister of communications to grant permission for the provisional operation of stations which are prepared, which are straining at the leash, and which are broadcasting. They are broadcasting on (?the basis of promises), semilegally, illegally [words indistinct]. This is an oddity.

[Unidentified correspondent] But those stations which have begun operating knew that they were operating on their own responsibility. And even if the law on radio and television comes into force, it is not certain whether these stations will get precisely those frequencies.

[Orzechowski] That is true, madam. I would like to stress one thing with full force, that all those who are operating at the moment—those four [as heard] stations, three radio and one television, which are in Poland and are operating—are aware that when the law on radio and television, which will create possibilities, comes into force, everyone will enter the competition. We will not try to get those frequencies on the principle of (?usucaption).

[Correspondent] What are the controversial points of this proposed new law?

[Orzechowski] These are, above all, the charges connected with state television and private television. It means that, at the moment, state television gets subsidies from three sources: the budget, subscriptions, and from advertisements. Commerce is to exist purely and simply from advertisements. It cannot get money from the budget, because it is commerce, it is private entrepreneurs, nor can it get money from subscriptions, because the law does not anticipate this.

[Correspondent] And it follows that it is a question of one source of finance.

[Orzechowski] One source of finance. If this, then not that. If that, then not this. [end recording]

[Correspondent] Yet Deputy Minister of Communications Marek Rusin said that those who have permission to operate could broadcast radio and television programs. However, those who do not have it cannot. He also said that we could not, at this moment, allow a slide into anarchy and all those operating illegally will be ordered to stop doing so.

Record Year for Telecommunications Predicted

92EP0059D Warsaw RZECZPOSPOLITA
(ECONOMY AND LAW supplement) in Polish
16 Oct p II

[Article by Wieslawa Mazur: "Before the Telecommunications Leap: It Is Easier To Place a Call Across the Ocean Than To Call Prague"]

[Text] Despite the fact that telephones in our country, especially in Warsaw, function very badly, this will definitely not be a bad year for telecommunications. Perhaps we shall even hear someday that in 1991 our standards rebounded from the bottom and we managed to move from lagging behind in European telecommunications to achieving a decent, civilized status. Perhaps.

In many ways, this year will be a record one for telecommunications. As never before, new customers are subscribing. Data from the middle of October records 164,000 new subscribers (the rate compared with a year ago exceeds 150 percent). For the first time, the needs of rural areas, where 37,000 telephones were placed this year, have been taken more seriously (a growth rate of 200 percent!). However, the most important thing is that there has not been diversion from the designated course of telecommunications developmental strategy; this should soon yield significant results.

According to the head of the Ministry of Communications, Jerzy Wiktor Slezak, there is a chance for a telephone boom, which will make possible the hooking up into the network of a million phones in the course of a year—just as it is in France or Spain. According to the ministry's plan, approximately 10-12 million telephones should be installed in Poland over the course of 10 years. At present we have fewer than about 3.5 million and 2.3 million people are waiting for a phone. About 7,000 villages lack any kind of telephone communication with the world.

As it turns out, sometimes there really is no evil that does not have its positive aspect. We are embarking upon making up our telecommunications delays at a time when it is possible to take advantage of the experience of other countries that are much more advanced than we.

The telecommunications development strategy is like building a building from the top, from the roof down. This is not always understood. In this case, it is building from international communications and not from the unpopular and neglected local network. It is difficult to explain to people why it is easy to call across the ocean today but one cannot place a call from Ochota to Warsaw's Praga district. But the developmental opportunities of other sections of telecommunications networks may depend upon telephones working efficiently in transatlantic calls, for example.

It is for this reason that in the fall of this year, an automatic international Komertel digital central international exchange was installed. It is small and accommodates only 2,000 numbers. In the summer of 1991, a universally accessible international automatic digital central exchange with 3,400 incoming and outgoing connections was activated in Warsaw by the American firm AT&T (Komertel is equipped with only 70 connections). This new central

exchange is merely a fragment of a far-reaching developmental strategy for telecommunications in our country. Its activation was accompanied by an increase in the number of international connections thanks to a laser-powered underwater cable that was recently put into operation. This cable runs from Copenhagen through Bornholm to Koszalin.

The digital Koszalin-Warsaw radio line is an extension of this cable. At the same time, the flow capacity/transfer function of the satellite station installed in 1981 in Psary was increased by equipping it with equipment making possible the introduction of a modern system of digital teletransmission and with a digital artery that links the station in Psary with the international central exchange in Warsaw. Thanks to them, since 12 August we have had automatic telephone connections from Poland to the United States for the first time in the national public network.

Nor are there any special problems in speaking by phone with someone who is in Germany, Holland, or Switzerland. But truly, the "world will be ours" when the next two strategic international central exchanges are opened next year and at the end of 1992 and the beginning of 1993 in Katowice, where the German Siemens is in operation, and in Poznan, equipped by the French Alcatel-Cit.

Unfortunately, all this does not mean that it will be immediately possible to effortlessly call from one Polish city to another, or from one Warsaw district to another. As far as the capital is concerned, the ministry expects the difficulties to end in 1992. The Warsaw network, in which there will be eight transit central exchanges, has been modernized thanks to credit from the Spanish Government: By 1995 it is slated to have the capability of adding 2 million new telephones.

With regard to intercity communications, a basic improvement is to take place when 12 automatic transit central exchanges scattered among major cities are put into operation more or less in two or, at the most, three years. Like the international central exchanges, these will be joined together by a network of lines using laser-powered digital cables and digital radio lines in various possible ways. The investments will be implemented with the use of World Bank credit (\$210 million).

Poland is an interesting market for many firms that produce telecommunications equipment. These firms are battling fiercely to install their equipment in Poland. We must take advantage of these opportunities. We are trying to choose the best and least expensive firms that not only want to sell to us but also want to manufacture here.

Agency Bans Private Radio, Television Stations

*LD1911234291 Warsaw Radio Warszawa Network
in Polish 2100 GMT 19 Nov 91*

[Text] Private radio and television stations throughout the country have recently received a decision by the State Radio Agency banning the transmission of programs, which is to take effect immediately. The federation supporting private radio and television stations does not agree with this decision.

ROMANIA

Government Supports Private TV Networks

*AU1911133591 Bucharest ROMPRES in English
1256 GMT 19 Nov 91*

[Text] Bucharest ROMPRES 19/11/1991—Upon the request of the Constanta branch of the Society for an Independent Television (SOTI), the Ministry of Communications authorised, with effect from 15 November 1991, the access of "Neptun" Television Studio to the local Eforie television station, for broadcasts Fridays from 0600 to 0800 [0400-0600 GMT] and Saturdays from 0700 to 0800 [0500-0600 GMT].

It was agreed that Neptun broadcasts will consist 40 percent of cultural, 30 percent information and 30 percent social-economic programmes.

Following this agreement, two of the three SOTI branches (Bucharest and Constanta) will be now broadcasting their own local programmes.

At present, 13 local television studios are operating in Romania, which are not connected to the SOTI network.

By giving green light to private programmes, the Romanian Government is supporting the development of alternative television networks to complement the national television service. The authorisations granted are transitory, until parliament adopts the law on the audio-visual media.

YUGOSLAVIA

Formation of Radio Television Serbia Announced

*AU2211203391 Belgrade Radio Belgrade Network
in Serbo-Croatian 1400 GMT 22 Nov 91*

[Excerpt] A unified public company, Radio Television Serbia, will primarily be a company from which we will expect quality, world-class programs. Above all, it should offer an objective picture of Serbia to domestic and international audiences and in this way assist Serbian development. This was stressed by Serbian Prime Minister Dragutin Zelenovic, who visited Radio Television Belgrade with Culture Minister Radovan Saranovic today. Ruzica Zorkic report:

[Begin recording] The main topic of this working meeting was the approaching integration of Radio Television Belgrade, Radio Television Novi Sad, and Radio Television Pristina into the unified public company Radio Television Serbia. Although efforts were made to share obligations equally, it was stated that the initial period of this new system will most greatly depend on the engagement of representatives of Radio Television Belgrade and on the current situation there. Informing his guests about the results of the work so far, Dobroslov Bjeletic, director of Radio Television Belgrade, described as their most important achievement the operation of the relay station on Mokra Gora and a breakthrough into the Croatian information

system, which used to be almost inaccessible due to its former regional division. Our enterprise, which creates almost a third of its income by itself is, of course, also facing problems typical of the current situation, such as how to secure foreign currency resources, Bjeletic said. Bjeletic stressed that the house must annually secure

\$6 million for satellite rental alone. In order to overcome these problems before the integration into the unified company, Radio Television Belgrade proposed that subscriptions be raised and that the state take a greater share in financing the program which is broadcast abroad. [passage omitted]

CHILE**Radio Chilena Buys 2 State Radio Stations***PY1911173891 Santiago Radio Chilena Network in Spanish 1600 GMT 19 Nov 91*

[Summary] Radio Nacional de Chile has accepted the offer made by Radio Chilena for the purchase of Radio Nacional de Chile in Talca and in Concepcion. Radio Chilena said that it will keep the staff of the two radio stations after the transfers are made.

PERU**Government Amends Decree on Telecommunications***PY2511232891 Lima EL COMERCIO in Spanish 17 Nov 91 p A4*

[Article by Alfonso Baella Tuesta from the "Unconfirmed" column]

[Text] The executive branch has modified seven articles of Decree No. 702 on telecommunications.

On the last day of enforcement of the powers bestowed to it by Congress, the government replaced Articles 2, 9, 25, 30, 31, 46, and 64 of the above-mentioned decree.

The new text of Article 25 sets forth that any modification in the ownership of shares of the previously mentioned enterprises will be immediately reported to the Ministry of Transportation and Communications. The original article established that any transfer had to receive prior authorization from the Ministry.

Article 30, which established that the Ministry of Transportation and Communications should regulate the compulsory promotion by broadcasters—throughout their programs—of information management principles highlighting the significance of man, and promoting the preservation of the family and the other values set forth by the Constitution, was also modified. The new article sets forth that the Ministries of Education and Transportation, and broadcasters' representative organizations will draw up a code of ethics and behavior that will preserve the above principles in the programs.

The government also declared the modernization and development of telecommunications—within the framework of free competition—a national interest. The state will promote, manage, and control the field of telecommunications.

It is commendable that the executive branch should be remarkably receptive to criticism in this field, and that it should rapidly implement an amendment to guarantee that freedom of expression, which is a foundation of democracy and an object of pride for our country, will remain unharmed.

Radio, Television Association Issues Communiqué*PA1811161291 Lima Global de Television Network in Spanish 0100 GMT 14 Nov 91*

[Text] In light of the approval of Legislative Decree 702, which significantly changes the current telecommunications legislation, the National Radio and Television Association, in compliance with its objectives to safeguard freedom of expression over radio and television and to preserve legal guarantees that ensure that they are used to uphold our democracy, believes it is imperative to state the following:

Legislative Decree 702 not only lacks guarantees of freedom of expression as established in our Constitution, but it also introduces the threat of expropriation to radio telecommunications companies. This is inadmissible.

The decree also includes provisions that would allow the government to control and manipulate assets owned by radio and television companies. The Ministry of Transportation and Communications has reserved the right to approve or disapprove the sale of radio and television company shares or of the company itself.

Finally, the decree authorizes the transportation and communications minister to intervene in the content of programs that are transmitted over radio and television. This would be accomplished by implementing mechanisms that would be regulated by the ministry.

In addition, the decree includes several other provisions that, instead of strengthening guarantees of the free exercise and competitiveness of radio and television transmission, only overshadow and weaken the clear-cut regulations now in use.

For all these reasons, the National Radio and Television Association, to which all radio and television companies in Peru are affiliated, believes that it is urgent to warn the whole country—particularly the legislative branch—that this decree endangers the guarantees of freedom of expression through radio and television. These guarantees are the foundation of our democracy.

Radio broadcasters are amazed by the approval of this decree that will only cause people to mistrust the government's conduct, which has been irreproachable until now.

State Monopoly Banned in Several Fields*PY1911200091 Lima EXPRESO in Spanish 8 Nov 91 p A4*

[Excerpt] The government approved a series of special measures eliminating bureaucratic and restrictive barriers hindering competitiveness in order to encourage private investments in development projects. The government also banned the state monopoly in telecommunications, sanitation, and urban renewal on a national scale.

The measures widening the horizon and field of action of private initiative are in the form of legislative decrees issued in accordance with special powers granted by Congress.

The new measures are consistent with other government open-market policies and attempts to free the economy of

state controls. They were approved during recent and successive cabinet sessions and were published in yesterday's issue of *EL PERUANO*. It is presumed that the government will issue other special measures before 15 November, when the special authorizations expire.

Bans on monopolistic and restrictive policies on free competition are contained in legislative Decree No. 701, which states that private enterprises will have freedom of action to produce and market goods, as well as to render services free of any restrictions.

In order to safeguard the fulfillment of these measures, the decree creates a Multisectorial Commission for Free Competition [Comision Multisectorial de la Libre Competencia]. This organization, whose members will represent the government and the private sector, will be responsible for safeguarding the full enforcement of the decree measures.

At the same time, through two other legislative decrees, the government eliminates the state monopoly in the telecommunications field, giving private investors the possibility of investing in this field and, at the same time, of investing in sanitation and urban renewal projects on a national scale.

Regarding telecommunications, the law currently in force considerably hinders the development of this service, especially in the zones in a state of emergency. In view of this, the government notes the public need to develop this sector with private capital in order to contribute to the pacification process. [passage omitted]

VENEZUELA

FAV Commander on Conditions for U.S. Radar
PA2211181191 Caracas EL NACIONAL in Spanish
13 Nov 91 p D-4

[Article by Wilfer Pulgarin]

[Text] The Venezuelan Air Force [FAV] has presented the Defense Ministry with two basic conditions for handling a U.S. Government request to install radar systems on national territory to detect aircraft involved in drug trafficking. The conditions are that Venezuelan technicians be allowed to participate in the operations and that the transmission signals be received simultaneously by Venezuelan and U.S. specialists.

Aviation General Commander Eutimio Fuguet Borregales believes that once these prerequisites, which he says are supported by Defense Minister Fernando Ochoa Antich, are satisfied, there will be no obstacle to Venezuelan, Colombian, Panamanian, and Peruvian participation in this sophisticated antidrug system designed by the United States

Fuguet pointed out that this involves an essentially political decision that is outside the bounds of the FAV; thus it is the chief of state who must define the situation. Fuguet added, however, that this does not prohibit him from voicing his

concern that national air technicians could be brushed aside or that Venezuela could be relegated to a secondary position regarding the transmissions.

"Those are basically the points in question, and we assume that they will be acceptable to the United States because they are matters of necessity and simple courtesy," the officer said.

The aviation general commander commented on this and other issues at a news conference in the Ayacucho Room of the Generalissimo Francisco de Miranda Air Base (in La Carlota), which was called to announce the activities to commemorate the FAV's 71st anniversary.

President Explains Privatization of Phone Company
PA1811200791

[Editorial Report] Caracas Venezolana de Television Network in Spanish from 1428 to 1435 GMT on 17 November carries live or recorded from the Presidential Palace a speech by President Carlos Andres Perez on the sale of the National Telephone Company of Venezuela [CANTV]. The speech was monitored in progress.

After describing the bidding process, Perez talks about the importance of abolishing a monopoly. "We have not replaced a state monopoly with a private monopoly," he says, adding that during the next nine years there will be freedom to compete in all areas of communication except for basic telephone services, that is, local and long distance calls. He explains that "the state will maintain its basic sovereignty" and that these basic services will only be developed through state concessions and under very harsh conditions.

Perez goes on to say that important services—such as cellular phones, pay phones, lines to rural areas, and fax services—will be available to anyone who wishes to invest.

Perez notes that the state outlined the privatization of CANTV as follows: 40 percent of the company was sold to a private company through a bidding process; 11 percent to CANTV employees; and 49 percent remains in the hands of the state. He explains that two consortiums bid for the company, which was sold for \$4.8 billion.

"The privatization policy is also aimed at redistributing wealth," Perez notes. He goes on to say that 24,000 thousand employees have become stockholders and that their 11 percent is valued at \$500 million.

Perez continues by saying that the most important thing about the sale of CANTV is that it symbolizes the great interest and confidence that foreign investors have in the future of Venezuela's economy and notes that privatization "in no way endangers the sovereignty and security of the state." He adds: "This process, on the contrary, strengthens the state's ability to regulate the telecommunication services."

He concludes by urging all Venezuelans to see the sale of CANTV as an example of the trust that everyone should have in the future of Venezuela.

REGIONAL AFFAIRS

Broadcasting Agreement Signed With Egypt*LD1811134191 Algiers APS in English 1022 GMT
18 Nov 91*

[Text] Cairo, 18/11/91 (APS)—A protocol of cooperation agreement between Algerian and Egyptian radios and televisions was signed yesterday in Cairo. This accord provides for exchanges of radio and television programmes which show the different aspects of the political, economic, social and cultural life of the two countries.

On another turn it encourages commercial exchanges as well as coproduction between the two institutions. The Algero-Egyptian signed by mid-October in Cairo, an accord providing for the materialization of cooperation between the two countries radios and television, it is recalled. [as received]

Turkish Daily Reports on First Kurdish Television*TA1511140891 Istanbul HURRIYET in Turkish
13 Nov 91 p 16*

[Text] Ozalp (HURRIYET NEWS AGENCY)—The Voice of Kurdistan, which broadcasts from Iraq, announced two nights ago that the first Kurdish television has been set up in Zakho and Sulaymaniyah. The radio also reported that in its first broadcast, this television transmitted a program praising President Turgut Ozal. The Voice of Kurdistan said: "Ozal is the only person in Turkish history who promoted sincere friendship and brotherhood between Turks and Kurds. He is also the first Turkish parliamentarian [as published] who opposed Saddam's dictatorship during the Gulf war and opened his arms to the Iraqi Kurds. Ozal also created a Turkish-Kurdish brotherhood in his country and made the Kurds' voice heard in the Western countries."

ARABSAT Board Meets, Discusses Problems*LD2111191791 Riyadh SPA in Arabic 1745 GMT
21 Nov 91*

[Text] Tunis, 21 Nov (SPA)—The management board of ARABSAT held its 58th session in Tunis with the Kingdom's participation. The Board, which will be meeting for five days, will discuss a number of issues relating to the work of the establishment and its future plans, what has been done toward launching the third Arab satellite, which is expected to be launched in January next year, in addition to the report of the committee, whose task was to select the offers to manufacture the second generation of satellites, and the outcome of negotiations with the concerned company. The board will also be discussing a number of administrative, financial, and technical issues.

Tunisian Minister of Communications Habib Lazreg opened the session with an address, in which he stressed the importance of the role being played by Arab satellites in the sphere of communication and direct television transmission, praising the high technical efficiency of this apparatus. He pointed out that the Arabs' resolve to launch the third satellite during the coming months and prepare the second

generation are factors which reaffirm the Arab states' interest in consolidating the Arab communication network. He expressed his hope that the ARABSAT network will overcome the difficulties facing it and called on the management board to look into the means for securing the success of the future projects of ARABSAT, especially with regard to funding and launching the second generation satellite.

EGYPT

ARABSAT Agreements Signed; New Channel Leased*NC2611203591 Cairo Arab Republic of Egypt Radio
Network in Arabic 1500 GMT 26 Nov 91*

[Text] The Egyptian Radio and Television Union [RTU] and the Arab Satellite Communications Organization [ARABSAT] signed several working agreements and protocols today. Information Minister Safwat al-Sharif stated that he discussed with Engineer Abdelkader Bouairi, ARABSAT director general, the future of the Egyptian Space Channel [ESC] and future cooperation with regard to the second-generation Arab satellite.

Safwat al-Sharif praised ARABSAT's success in putting Arab media on the international media map. He added that the transmission of ESC and other Arab channels on the Arab satellite and the services provided in the sphere of exchanging Arab news and programs represent the peak of media success.

Safwat al-Sharif added that the protocol that was signed today, which is connected with the requirements Egyptian media will place on the second-generation Arab satellite, will ensure that Egyptian television transmission will reach viewers' homes directly from space. He said this represents a major development for the second-generation satellite.

He noted that agreement has also been reached on devoting an additional channel on the current satellite as a backup for ESC. This agreement was signed by Amin Basyuni, chairman of the RTU board of trustees and ARABSAT general director Abdelkader Bouairi.

[Cairo Arab Republic of Egypt Radio Network in Arabic at 1830 GMT reports that the RTU board met under the chairmanship of al-Sharif. "The board of trustees approved RTU's leasing of a new ARABSAT channel to maintain the service of the Egyptian Space Channel until a third satellite is launched in mid-February. The board also agreed to procure engineering equipment necessary to operate a channel in vital areas that currently receive ESC."]

Space Channel, Transmissions May Be Suspended*NC2311100291 Cairo AL-AKHBAR in Arabic
19 Nov 91 p 12*

[Report by Wahid al-Sunbati from the "Radio and Television" page]

[Text] The Radio and Television page has learned that transmission of the Egyptian Space Channel to all the countries that receive Egyptian programs is expected to be

suspended during this month for one to three months. This is because the first satellite, which the Egyptian Radio and Television Union is leasing from the ARABSAT Organization [to broadcast Egyptian Space Channel programming], is running out of fuel.

The expected lifespan of this satellite was seven years from the time it was launched in 1985, but because it inadvertently malfunctioned, its projected lifespan was cut short by a few months. The ARABSAT Organization is expected to launch a third-generation satellite to replace it next month or this coming February. The Egyptian Space Channel will resume transmission through this satellite, which will operate for another seven years, once it is launched.

ARABSAT's first satellite is co-leased by the Kingdom of Saudi Arabia to broadcast the Saudi space channel, which is known as MBC [Middle East Broadcasting Center].

INDIA

Value-Added Telephone Privatization Planned
92WT0030A Bombay THE TIMES OF INDIA
in English 16 Oct 91 p 17

[Unattributed article: "DoT Plans Phased Privatisation: Pilot"]

[Text] New Delhi, Oct. 15 (PTI)—The government has decided to privatise the value-added telephone services such as cellular phones or popularly known as car phones, video conferencing and video paging, the minister of state for communications, Mr. Rajesh Pilot, said here today.

This was part of the over-all scheme to go in a "slow phased manner" for privatisation of the telephone services. "If it goes well," then the government would see to what extent it could go, the minister said, while addressing a press conference after his return from Geneva.

Mr. Pilot had led the Indian delegation to Geneva to attend the Telecom '91, the world's largest telecommunications exhibition, held after every four years, to project Indian capabilities in the international telecom market and to scout for the latest technologies suited for India.

The department of telecommunications had put up a stall at the exhibition for the first time.

Mr. Pilot denied that the government had changed its priority by allowing the private sector to manufacture the cellular phones. For the last four years, a public controversy was going on whether the country should have the cellular phones or not.

While some people had been critical of the move saying that the "car phones" would create elitism in a telephone-deficit India, the others had been arguing that the technology would enable the country to extend the telephone services to the vast rural areas having no telephone facilities at present.

The minister also said the government had decided to import the latest telecom technology to upgrade and modernise the telecommunication services in the country. For this purpose, Mr. Pilot said, he had invited the world's leading seven multinational companies to bring to India

their latest technology under the "transfer of technology, manufacture and export" agreement.

Mr. Pilot said during his stay in Geneva he had talked to the representatives of AT and T (of the U.S.), Alcatel (of France), Ericsson (of Sweden), Siemens (of Germany), NEC and Fizida (both of Japan) and G.P.T. (of Britain).

The department of telecommunications has been using the "E-10B" telephone exchange technology sold by the Alcatel under the ten-year-old transfer of technology.

The minister said India was insisting that Alcatel should provide India its latest "OCB" technology. But the company was non-committal.

He said the seven companies had promised to send their offers this month and these would be evaluated by a technical committee. After that the latest technology would be selected and agreement signed. By the beginning of the next year, the new technology would be available.

Referring to the Athreya committee, which was set up last year to study the question of restructuring the working of the DoT, Mr. Pilot said its recommendations were being studied, and would be put up before the cabinet for its consideration.

The minister said they had already decided to decentralise the working of the DoT by holding the board-level meeting in each state to sort out the customers' problems on the spot. Similarly, certain powers had been delegated to the chief general managers.

Mr. Pilot said the biggest problem being faced by the ministry was resource constraints. He said they had proposed Rs 40,000 crores for the telecom sector in the Eighth Plan, beginning next year.

Out of it, he said, Rs 10,000 crores would be raised through the bonds and Rs 30,000 crores through internal resource generation. The ministers emphasised that there would be no budgetary support available to the ministry.

Mr. Pilot said the DoT was committed to provide seven lakh new telephone connections by March, 1992, telephone connections to all village panchayats by March 1995, and the STD facilities to all the districts by end of the current financial year.

Referring to the working efficiency in the telecom department the minister said a "lot of hard work" had to be done and the work-culture changed.

Admitting that there was a large-scale revenue leakage in the operation of telephone services, he said the CBI had been asked to look into it.

The minister said the monitoring of complaints regarding telephone faults would be done at the officers' level.

IRAN

New Television Satellite Station in Ilam Province

LD2011224391 Tehran Voice of the Islamic Republic of Iran First Program Network in Persian 1030 GMT 19 Nov 91

[Text] Thanks to the completion of a television satellite station in the Koln region, near Badreh in Ilam Province, three villages in this region can enjoy program on the IRIB Television first program network. According to a report from the central news unit in Ilam, this five-watt station was erected by technicians from the television and FM radio repair and maintenance unit in Ilam. Yesterday the inhabitants of three villages in the Koln region began watching first program shows on channel six on their television sets.

Firm Lauds Highest Telecommunication Tower

LD2511144191 Tehran Voice of the Islamic Republic of Iran First Program Network in Persian 1030 GMT 25 Nov 91

[Text] The highest freestanding telecommunication tower [dagal] in Iran has been built by Arak's Abangan company. This is the title of our news report to which we draw your attention.

To promote and strengthen the country's telecommunication links, the highest metal freestanding mast—117 meters high—in Iran was designed and constructed by Arak's Abangan Company, and activated in the telecommunication system of the resistant city of Abadan.

The acting managing director of Arak's Abangan Company announced this news and added that the entire design and construction of the telecommunication mast was carried out thanks to the efforts of the company's workers and experts. Pointing out that the mast is used in mountainous regions and in sensitive and complex communication areas, the responsible official said: On this telecommunication mast, weighing over 90 tons [word indistinct] of three to four meters long parabolics [preceding word in English] will be installed.

Elsewhere in his remarks, he said: This huge telecommunication tower, two units of which have so far been manufactured, is galvanized [preceding word in English] and enjoys the greatest resistance power over a 30-year period. Furthermore, in addition to resisting earthquakes, it is capable of resisting wind and storm pressures of 160 km per hour.

In conclusion, the acting managing director of Arak's Abangan Company said that the company supplies 80 percent of the country's required freestanding and moored telecommunication masts each year. He confirmed that Arak's Abangan Company will manufacture over 2,600 units of telecommunication masts ranging from 15 to 117 meters in length, as required by the country in the next four years, and will place them at the disposal of the country's telecommunication company.

Dorud Radio Transmitter Now Operating

LD2011100991 Tehran IRIB Television First Program Network in Persian 1530 GMT 19 Nov 91

[Text] Dorud's radio transmission station has gone into operation. With the operation of the radio station, the construction of which cost over 30 million rials in foreign exchange and in rials, from now on local programs from the Khorramabad center and the programs of the first network of the Voice of the Islamic Republic will be boosted and broadcast on medium wave, on the frequency of 1,602 khz for the towns and districts of Borujerd, Dorud, Ali-Gudarz, 'Azna, 'Oshtorina, Zagheh, and some parts of Central, Esfahan, and Hamadan provinces.

In addition, with the completion of the microwave system of the Voice of the Islamic Republic of Iran, Khorramabad center, the towns of Dorud, Borujerd, and 'Oshtorina are now covered by local television.

ISRAEL

Invention Makes International Calls Untraceable

TA1411150291 Jerusalem Qol Yisra'el in English 0500 GMT 14 Nov 91

[Text] A new Israeli invention will make it possible for international telephone calls to be made in which the person being called will not be able to trace where the call comes from. The idea is to enable people to make international calls that cannot be traced. The new system has been developed by the Israeli Solan communications company.

EBRD Announces Loans for 2 Major Projects
*LD2711102291 Moscow TASS International Service
in Russian 0240 GMT 27 Nov 91*

[Article by TASS correspondent Aleksandr Sisnev]

[Excerpts] London, Nov 27 (TASS)—The European Bank for Reconstruction and Development [EBRD], which was founded to help the countries of Eastern Europe, the USSR included, announced on Tuesday that it is offering financing for two major projects in the Soviet Union.

The EBRD is to loan 12.5 million dollars to a subsidiary of the American "Parker Drilling Company" to start building three oil platforms in west Siberia. The same subsidiary will operate these installations under a contract concluded with the Soviet-American joint venture "White Knights Joint Enterprises." [passage omitted]

As was also announced on Tuesday, the EBRD is to lend 6.5 million dollars to the Soviet company "Sovintel," which is to build a new digital international telephone system in Moscow Oblast. This system will be completely independent of the current international dialling service for subscribers in Moscow, and when it comes on line it will provide hotels, business centers, and company offices with high-quality telephone and fax lines. It will have considerable earnings potential in freely convertible currency.

In addition to the loans for these two projects, the EBRD has already advanced 6.5 million ecus for a managerial training program for Russia, privatization, and establishment of a food distribution system.

Report on Government's New Communications System

LD1911162191

[Editorial Report] Moscow Russian Television Network in Russian at 2035 GMT on 18 November broadcasts a 15-minute program on the USSR Government's new communications system.

The program opens over footage of the August coup, and a voice announces that one of the results of events at Foros is that the government communications system has been reorganized.

The video then cuts to an office where correspondent Vladimir Martynov talks of the secrecy which surrounded the former USSR KGB's government communications directorate. He then goes on to interview the chairman of the recently formed USSR president's committee for government communications, Aleksandr Vladimirovich Starovoytov. Starovoytov is captioned as chairman of the USSR president's committee for government communications and doctor of technical sciences.

Starovoytov begins by saying that the formation of his committee was a result of the coup, although communications experts had talked previously of an independent channel for government communication. When asked what guarantee he can give that he will never cut off the president's communications, Starovoytov replies that he is

directly subordinate to the president so should he do that, then it would be betrayal of his president which is something that he would never do.

The video cuts again to show journalists going down some steps into an underground room along the length of which run row after row of cables which carry government communications. Two unidentified officials explain how these cables run between all the ministries and departments in Moscow, and carry messages throughout the country. The officials reject any idea that eavesdropping on these lines might be possible.

The "Vesti" film crew is the first to be allowed to film these underground rooms which are nuclear-proof.

After a brief shot of the Kremlin, the video shows a room which is full of computers and fax machines. This, the reporter states, is the nerve-center of the communications system used by the president in communicating with foreign heads of state. Coded messages are sent from here. A typist is seen feeding in the messages, then an unidentified official talks briefly of the history of this department. He says it came into being in August 1963 as a result of the Caribbean crisis when the U.S. President was unable to reach the Soviet leadership.

Footage of various museum exhibits are then shown with martial music to provide the background for a brief history of the development of the communications department.

Starovoytov in his office talks briefly about the selection of young specialists to work in this department.

Another room full of telephonists is now shown and Martynov interviews the head of this section who is not further identified and who explains how government leaders can be linked up with Washington or Khabarovsk in a matter of minutes. One of the telephonists comments that at the present time, most calls are being put through to Grozny, Yerevan, and Tbilisi.

Starovoytov explains that talks are now going on with representatives of the various republics of the former Union. All sides involved in these talks appreciate the need to preserve a single information space and to cooperate and coordinate work in the sphere of communications.

He then goes on to explain the work of the units of government communication troops who come into their own when there is an emergency such as an earthquake or a train crash when an emergency confidential link is needed immediately.

Martynov then talks of another state secret now being uncovered. In a field, several vehicles topped with satellite dishes and covered with camouflage netting are seen. Alongside them troops are standing, and Martynov interviews a unidentified colonel in charge of this unit who says that it is the first time his unit has been filmed. He talks of instances when his unit has been used and explains something of their work before demonstrating how in a matter of minutes a line can be fixed up from the forest clearing where they are located, and Khabarovsk. The colonel concedes the

possibility of intercepting one of these calls, but states that such a call would be impossible to decipher.

Further footage of the coup is shown, and Martynov once more stresses that the events of August resulted in the creation of this new committee, and the hope is that the August events will not be repeated now.

Finally, Martynov speaks once more to Starovoytov in his office and he explains that the main function of his committee is to guarantee confidential lines of communication. They are using the most up-to-date equipment to ensure this. The committee is also ready to offer its services to industrialists, traders, and bankers to assist them in their efforts to improve the economy.

Intersputnik Planning Purchase of Satellites

*OW1511072091 Moscow INTERFAX in English
1715 GMT 14 Nov 91*

[Following item transmitted via KYODO]

[Text] On November 15 the International organization of space communication "Intersputnik" will mark its 20th anniversary. The date will be marked by signing a contract under which "Intersputnik" will purchase two new-generation satellites "Express" in geostationary orbit.

For information call: 244-0333.

TASS Reports USSR Satellite Launch 22 Nov

*LD2511133491 Moscow TASS International Service
in Russian 1125 GMT 25 Nov 91*

[Text] Moscow, 25 Nov (TASS)—The Proton rocket carrier launched another artificial earth satellite, Kosmos-2172, in the Soviet Union on 22 November. On board the satellite is equipment for relaying telegraph and telephone information, operating on centimeter wave length. The equipment is working normally. Incoming data is being processed by the computer coordination center.

Information Network Merging Data Banks Planned

*LD2411132991 Moscow POSTFACTUM in English
2115 GMT 23 Nov 91*

[Excerpt]

Business News

An information network [is] to be created in mid-1992 by merging data banks containing data on enterprises of European Russia, Siberia and the Far East. According to Victor Dil, chairman of the Inter-regional Economic Coordinating Center (IECC), the issue of creating this network is to be raised at the business conference to take place in Novosibirsk on November 23-December 3.

According to Mr. Dil, the main task of the united information network that is to be created by merging the data bases of the IECC and main computational center of the Economics and Finance Ministry of Russia, is the search of partners for long-term horizontal economic ties in the RSFSR [Russian Soviet Federated Socialist Republic] and

abroad, as well as intermediary activity. Matters of economic planning for 1992 in conditions of deterioration of vertical management structures, peculiarities of the privatization process, resource managing, banking system and investment and taxation policy will be discussed. Representatives of the Economics and Finance Ministry of Russia, Russian Finance Institute and managers of enterprises and organizations of the trans-Urals region of Russia as well as Baltic and Hungarian representatives. [sentence as received]

Lev Antonov, manager of the company, told PF [POST-FACTUM] that the IECC is a subsidiary of Konversiya and that it was organized to promote business ties between Siberian enterprises. According to Antonov, on December 1 the possibility of issuing stock of the IECC will be discussed. [passage omitted]

Republican Cabinet Approves Georgian News Agency

*LD2311070991 Moscow TASS International Service
in Russian 1727 GMT 22 Nov 91*

[Article by TASS correspondent Albert Kochetkov]

[Text] Tbilisi, 22 Nov (TASS)—The decision to set up a Georgian News Agency [Gruzinskoye Informatsionnoye Aгенstvo] to replace SAKINFORM, which was disbanded on Thursday, was made today by the republican Cabinet of Ministers. The new service has been set the task of providing timely and objective coverage of the positive changes in the life of the republic. The agency will actively and convincingly carry out counterpropaganda against internal and external disinformation about Georgia, its director Irakliy Kenchosvili told TASS.

Astra Agency Director Interviewed

*LD0411230491 Moscow Radio Moscow World Service
in English 1530 GMT 2 Nov 91*

[Interview with Astra agency general manager Armen Oganessian by Eugene Krylov; place and date not given—live or recorded]

[Excerpts] [Krylov] Hello, I'm your host, Eugene Krylov. Welcome to another edition of our monthly review of the Transcription Service, informing our listeners and managers of local radio stations about the latest releases of Radio Moscow. This time I'd like to start by reminding you that the World Services of Radio Moscow in English and Russian, as well as the Transcription Service, are parts of the Astra agency, which is marking its first birthday these days. [passage omitted] The founder and general manager of Astra, Armen Oganessian, is our guest today. Hello Armen.

[Oganessian] Hello.

[Krylov] So Astra is one year old and so could you please elaborate somewhat on the results of this past year—perhaps you could speak even of some achievements—and say a few words about the prospects?

[Oganessian] Well in general we are quite satisfied with the results of the year. If a year ago I had been told that THE WASHINGTON POST would mention one of our films as

a very interesting and great breakthrough, I think I would be surprised, I would not believe it a year ago. I think that Astra, it started as an idea basing on radio to build a TV company—with English language—and I think that was a reflection of changes that took place a year ago in BBC Bush House and in foreign broadcasts and in Deutsche Welle in Germany. They tried to base a TV section, a TV department based on their foreign radio broadcasts and this development brought, I think, facilitated, our efforts just to start a kind of this company and we call it Astra, which is associated TV-radio agency.

And we started producing films; we started producing TV programs using our satellite Moscow global system and now we have as our partners, and who receive our signal in the United States, the company CONUS, which is, I think the fifth, if I'm not mistaken, the fifth among the biggest companies in the United States. Together with them we covered via satellite the latest Bush-Gorbachev summit and then we just, together with a team of their journalists here, we covered changes in media after the August events. And we want to proceed, and we are nearly to conclude an agreement on this basis, with CONUS on long term—I mean long-term agreement. And we are working hard in producing of documentaries. [passage omitted]

But it's not the only thing that we are working at. Via our Moscow global system we are providing our clients and the audience in the world in general with the coverage of events which are taking place, very dynamic events, in the Soviet Union. So we are working in both genres, in TV viewers and in producing documentaries. [passage omitted] So as you see we are concentrated in documentaries rather in history and culture than on, so to say, on hard politics. And I think this transformation reflects the transformation in general in the media here, I mean in media which used to be very political. [passage omitted]

[Krylov] We have heard about the efforts of Astra to expand in the sphere of television, but we must not overlook our radio services. It would be interesting to hear the opinion of the general director about the future of radio. Are there any changes in subjects or forms of broadcasts?

[Oganesyan] I think there was and there is still a kind of, so to say, standard attitude to short-wave broadcasting, that it is diminishing its role in the world, that it's just moving to its sunset and so forth. So short-wave broadcasting is dying and this process will take about a decade. Well, I don't think this is true. I don't think this is the true reflection because I think at any time you will find a bulk of strange people who want to know what neighbors are doing, what they are thinking about the world. And so far radio remains a means of communication which cannot be replaced overnight. And I think that, yes, television based on satellite and bringing you live pictures from other countries certainly is (? as staunch as it used to be competitor) to radio, but nevertheless radio has its advantages and I think short-wave broadcasting will develop. And again, though we put much emphasis on culture and education [words indistinct]

[Krylov] And here is the last question to the general director of Astra, Armen Oganesyan. Numerous independent agencies and radio stations in the Soviet Union spring into existence and into the whirl of the information market. Does Astra feel strong enough to compete with them?

[Oganesyan] Yes, certainly. I feel certain about this because we have a very good and qualified staff. We are in the market now for many, many years. We know all dimensions of this work—technical matters and not minor issues of dealing with the PTT system in the Soviet Union, which is very complex. And we have a very qualified technical staff which—I don't know which company can enjoy this, can enjoy such a qualified technical staff as we do. So I think that, yes, there is fierce competition but we have our own placing in this market and frankly speaking I don't see a chance, a serious chance, for any of our competitors just to replace us in the market.

But I think that in general Astra is open for cooperation and some joint venturing in the future. I can't exclude this and I think that this is a possible development. For example we can, we have a middle wave [as heard] in Moscow, very powerful and strong frequency and it covers Moscow and Moscow Region and we want to transform it into, not 100 percent commercial, but into a kind of international radio station with the programing coming from other radio stations in the world, a kind of a monitoring program. Businessmen, foreigners, tourists—they want to know what is actually going on in this country and they do tune to Radio Moscow World Service in Moscow for this frequency. And we want to make it more life [as heard], a little bit more commercialized, with more commercials in this program, in this 24-hour service, and I think we have very interesting proposals coming both from Soviet companies here and foreign entities. And I think we are to make our choice and very soon we can face big and drastic changes in our broadcasting for Moscow and Moscow Region.

I think business programs about business in the Soviet Union and in general in this world is also a new dimension in our work. Probably you know our program "New Market", which is becoming very popular among businessmen all over the world. After all, some of our partners did find Astra because we have this program. They just listen to this program and they do call us asking for some business support, for some consultations. And now we are working with a company which, (?a respectful) company, which receives economic information from Astra, from the radio wing mainly, because they have this habit of analyzing what is on in the economy in the Soviet Union. And we are open for any other clients on this matter.

[Krylov] Well, from the sound of it our prospects do look bright and I think that radio station managers who have not yet started cooperating with Astra should hurry up. Don't be late! Thank you, General Director Armen Oganesyan.

SWEDEN

State Phone Agency in Venture With Dutch
92WT0029A Stockholm DAGENS NYHETER
in Swedish 8 Oct 91 Sec C p 1

[Article by Thomas Lerner: "Televerket Concentrating on European Cooperation"]

[Text] Geneva—Televerket is embarking on an extensive cooperation with its Dutch counterpart, PTT Telecom Netherlands. The newly formed Unicom company will launch a major effort on the European telecommunications market.

This is the first time two European telecommunications agencies have joined forces to meet the increasingly tough international competition from American corporations and British Telecom, among others.

It is estimated that in three years the new company will reach sales of around 1 billion kronor. Televerket will invest approximately 100 million kronor in building up Unicom in 1992.

"We and the Dutch are both too small for the European telecommunications market. We have the same views on how to survive in an increasingly tough market," Tony Hagstrom, general director of Televerket, commented.

For Big Firms

Unicom will try to find partners in the United States and the Far East as soon as possible in order to become a worldwide competitive alternative on the increasingly deregulated telecommunications market where state agencies and companies used to have a monopoly on telecommunications services.

The cooperation with PTT Telecom Netherlands does not involve traditional telephone calls. Unicom will primarily offer big firms advanced telecommunications services.

Among other things this involves guaranteeing businesses direct contact between units in different countries at all times. As well as new communications services such as telefax and various forms of satellite service. One of the first concrete results of the expanded cooperation is that Televerket and PTT Telecom Netherlands will combine their foreign offices, starting in London. By the end of 1992 newly formed Unicom will be represented in 10 countries.

International

In recent years Televerket has turned toward the international telecommunications market. Among other things agency staff members are helping to build up a mobile telephone network in Estonia.

"This international effort must continue if we are to become a successful actor in the telecommunications area," Tony Hagstrom maintained.

On Monday he and a number of Televerket representatives went to Geneva, Switzerland to attend the gigantic telecommunications fair, "Telecom '91." State telecommunications

agencies and private companies will display the most modern products they can offer for about a week.

That telecommunications is an important issue in the 1990's is shown by the fact that United Nations Secretary General Perez de Cuellar opened the fair.

Agency, University in Research Pact
92WT0029B Stockholm SVENSKA DAGBLADET
in Swedish 15 Oct 91 p 6

[Swedish News Agency report: "New Telecommunications Technology in Education"]

[Text] Goteborg—On Monday Goteborg University and Televerket signed a cooperative agreement covering the next 10 years. For the university it involves more than just acquiring rapid communication between its approximately 60 locations in Goteborg. The university will also have access to the latest in communications technology for education and research. Televerket will utilize the cooperation to test its latest technology and will work with the university in developing techniques and methods that can also be used in other areas besides academic research and development.

Televerket Chief on Development Plans
92WT0029C Stockholm DAGENS NYHETER
in Swedish 11 Oct 91 Sec C p 2

[Article by Thomas Lerner: "Falldin: Televerket Must Become Joint Stock Company"]

[Text] Geneva—"We must soon convert to a joint stock company and be listed on the stock exchange," Televerket board chairman Thorbjorn Falldin told DN [DAGENS NYHETER].

At the same time Televerket will cut 4,200 employees in order to meet the increasingly stiff competition on the Swedish telecommunications market.

"Personnel cuts and a stock exchange introduction are both necessary to keep us from losing the fight for telecommunications customers in the future," Thorbjorn Falldin went on.

He maintained that getting on the stock exchange will enable Televerket to meet market demands directly in the same way as other exchange-listed companies.

"I will get in touch with the new communications minister as soon as possible and discuss the matter with him."

Televerket will be competing on the international market for the rest of the 1990's. That will make it necessary to run the enterprise as a joint stock company, according to Thorbjorn Falldin.

"The actors in the telecommunications market want to do business with companies, not with state agencies. But incorporation and a stock exchange introduction will not mean that people in rural districts will have poorer telecommunications service. That is a risk if one simply concentrates on profitable customers," he stressed.

On Thursday Televerket's board of directors established new rates for local calls, long distance calls inside the country and calls to other countries. As DN reported earlier the rates for private customers will be raised an average of 8 percent while businesses will get a rate reduction of 2 percent.

In the Stockholm area the increase for private customers will be higher—15 percent in some cases—because an entirely new zone division will be introduced for local calls.

"Today people in the rest of the country are subsidizing 1.2 million Stockholm residents. That is not fair," Tony Hagstrom, Televerket's director general, commented.

Televerket's board of directors also decided that 4,200 employees will have to go by the end of December 1992. This will be achieved partly through natural attrition.

Tony Hagstrom hopes the reductions can be accomplished without dismissing anyone. But he did not rule out the possibility that additional personnel cuts will be made in 1993 and 1994.

"We have heavy investments which must be financed at the same time as the proprietor—the state—has increased the yield requirement. In other words we must turn over a larger share of the profits."

Along with the personnel cuts today's 20 telecommunications areas will shrink to eight. A special market company will be formed for big customers with more than 500 employees. And in the future Televerket Radio will devote its efforts exclusively to mobile telephony.

Televerket To Aid Estonia Phone Company
92WT0029D Stockholm DAGENS NYHETER
in Swedish 11 Oct 91 Sec C p 2

[Unattributed report: "Televerket Assisting Estonia"]

[Text] Geneva—Swedish Televerket and its Estonian counterpart, Estelcom, have formed a joint risk company. The new company was presented on Thursday in Geneva. The company, whose activities will be run from a headquarters in the Estonian capital, Tallinn, will be in operation just six months from now.

The joint risk company will modernize Estonia's telephone network, both nationally and internationally. In practice it will function as Estonia's telecommunications authority.

Ericsson Chief Warns of Tougher Competition
92WT0029E Stockholm DAGENS NYHETER
in Swedish 15 Oct 91 Sec C pp 1, 3

[Article by Thomas Lerner: "Ericsson Anticipates Lower Dividends"]

[Text] Ericsson stockholders must count on lower dividends for several years. The money is needed for continued investment in research and development. This point was made by group president Lars Ramqvist in a DN [DAGENS NYHETER] interview.

"The international market is so full today that those who want to survive must be in the technological vanguard. We are in that position. And we must stay there," he went on.

Lars Ramqvist returned to the daily routine today after spending more than a week at the international telecommunications fair in Geneva.

There he worked practically around the clock. According to branch analysts Ericsson is prospering just now.

"All the orders we have fought for recently have ended favorably for us."

Wealthy Company

Ericsson is a wealthy company today. But profits can shrink quickly if the intensive concentration on research and development is checked.

"Those who are not in the front line today will be losers a few years from now."

In 1991 alone technical development will cost Ericsson around 10 billion kronor. This can be compared with the 15 billion Volvo has spent for several years on producing the new 850 model.

"We are one of the leading telecommunications companies. I believe the stockholders want us to remain in that position. Therefore I also believe they are prepared to accept smaller dividends for a few years if they know we are really concentrating on development," Lars Ramqvist stated.

Ericsson has 70,000 employees today and is on the market in over 100 countries. It is basically a multinational business.

Base in Sweden

"But we have not forgotten that our base is in Sweden. And it will stay that way even though relatively more and more of our development work will be done abroad."

But according to Lars Ramqvist fewer Swedes will be on the Ericsson payroll in the future.

"The rapid technological development means that both systems and units will have a very large capacity. Therefore fewer employees will be needed in both research and production. I regret having to say that this is what the future holds."

In recent years Ericsson has invested billions in mobile telephony, telecommunications where the usual lines and cables are replaced by radio waves.

During the telecommunications fair in Geneva Lars Ramqvist noted two important breakthroughs on the world market for this modern telephony. These are:

- An order to set up a network in the United States and Great Britain for the mobile transmission of data communications. The estimated value is 1.3 billion kronor.
- An order to set up a network for the new generation of mobile personal telephones in Great Britain. This also involves a billion-kronor contract.

But Lars Ramqvist also pointed out that Ericsson is going to develop a traditional digital mobile telecommunications network in Hong Kong. It will be the first of its kind in Asia.

We noted that Ericsson is praised for the high quality of its systems and products. But many criticize its marketing.

"I totally disagree. We have very talented marketers who succeed in winning one order after another in the toughest competition."

Recently there have been reports in the press that Ericsson has lost ground in important markets.

"If anything our surveys show the opposite. On the mobile telephone side, for example, we have increased our market share from 40 to 41.5 percent."

Alcatel of France, Siemens of Germany, Motorola, Northern Telecom...Ericsson is competing with a handful of companies for dominance in the telecommunications market of the future.

"We must continue to be world leaders in the next century. We have the expertise and the money. Now it is my job to ensure that the resources are used in the best way."

Ericsson Makes Mobile Phone Breakthrough

*92WT0029F Stockholm DAGENS NYHETER
in Swedish 11 Oct 91 Sec C p 3*

[Article by Thomas Lerner: "Ericsson Gets Billion-Kronor Order"]

[Text] Geneva—Ericsson has announced another breakthrough on the world market. This time it involves wireless mobile transmission via radio. The American order is worth around 1.3 billion kronor.

"Now we are taking off!" Ericsson President Lars Ramqvist told DAGENS NYHETER. In the last four years Ericsson has invested hundreds of millions of kronor in developing a system for mobile data communication.

Portable computers can now be linked to a central computer via radio without the help of the usual telephone wires.

The world market for this unique system—called Mobitex—is expected to explode in the 1990's.

The American Bell South telephone company and Ram will invest in mobile computer communications in the United States and Great Britain in the next few years. During the first stage Ericsson will deliver equipment worth \$225 million or 1.3 billion kronor.

Head Start

"This is an extremely important order. It strengthens our head start on the market. It involves a trend breakthrough," Lars Ramqvist stated.

In the last four years he has personally participated in the work to win this enormous order. And for that reason he was obviously pleased when the deal was announced in Geneva on Thursday in connection with the Telecom '91 telecommunications fair.

"Ericsson is a Swedish company with its base in Sweden. We will manage on our own and continue to develop. This characterizes our entire business strategy."

Close to Customers

But Lars Ramqvist stressed that relatively more and more of the technical development will occur outside Sweden.

"This activity must be carried out close to the market, close to our customers. That is the only way to directly adapt the systems to the consumer."

Ericsson is investing 10 billion kronor in research and development in 1991.

"We could 'haul out' the profits and give our stockholders higher dividends. But we have chosen to plow this money back into the business. This is necessary to deal with the tough competition. Stockholders will have to be patient for a few years. And no one applauds short-term profits."

The rapid technical development means that Ericsson will cut the number of employees in Sweden in the 1990's, Lars Ramqvist predicted. This will affect both factory workers and design engineers.

Country Seen as Major Test Market by Industry

*92WT0029G Stockholm DAGENS NYHETER
in Swedish 17 Oct 91 p 4*

[Article by Thomas Lerner: "Sweden a Test Market for Telecommunications Industry"]

[Text] The Swedish people are world champions when it comes to making telephone calls, faxing and communicating via computer. The market for these telecommunications services is worth 20 billion kronor today, a market that will grow during the rest of the 1990's.

Foreign firms see Sweden as an interesting market for testing new products and new technologies. British Telecom, the United States's AT&T, Japan's NTT—the list of telecommunications operators already in Sweden or on their way here is getting longer.

Televerket's management feels that the only way to be able to compete in the international arena is to be better than the competition on the domestic market. Both Televerket chief Tony Hagstrom and the agency's board chairman, Thorbjorn Falldin, want to convert Televerket quickly from a government enterprise to a joint stock company. This will probably happen next year.

The management would also welcome an introduction on the stock exchange. This is considered necessary if Televerket is to be regarded internationally as a credible actor. Few want to negotiate with a partner when politicians can become directly involved in business activities.

It is the rapid technological development in the telecommunications area that lies behind Televerket's international effort. The expansion of wireless mobile telecommunications networks without traditional cables is one example.

Telephone calls to other continents via satellite will soon be only slightly more expensive than calls to neighboring communities.

TURKEY

More TV Relay Stations Inaugurated *TA1611073991*

[Editorial Report] Ankara Turkiye Radyolari Network in Turkish at 2100 GMT on 10 November reports: "TV-1 relay stations have been commissioned in Artvin's Efeler and Kirazalan and in Trabazon's Karatepe and Sutpinar. TV-2 and TV-3 relay stations in the Aslancik quarters of Giresun have also been commissioned."

Ankara Turkiye Radyolari Network in Turkish at 2100 GMT on 11 November reports: "TV-1 relay stations in the Kurbanli and Gozebasi regions of Erzurum and in the Demirozu region of Basburt have become operational. So have TV-1, TV-2, and TV-3 transmitters in the Cataksu region of Erzurum."

Ankara Turkiye Radyolari Network in Turkish at 0530 GMT on 14 November reports: "The following television relay stations have become operational: the Yagcilar TV-1 and TV-2 station in Aydin, the Susurluk TV-2 station in

Balikesir, the Doyranli TV-2 station in Izmir, the Doganyurt TV-3 station in Kastamonu, and the Basoren TV-3 station in Ankara."

Ankara Turkiye Radyolari Network in Turkish at 2100 GMT on 14 November reports: "TV-1 relay stations in Kayseri's districts of Beycagi and Orandere and a TV-2 relay station in Akyol's district of Agirhisar have been commissioned."

TV Relay Stations Become Operational *TA2311074491*

[Editorial Report] Ankara Turkiye Radyolari Network in Turkish at 2100 GMT on 17 November reports: "The TV-1 relay stations in Kars' Ardahan District Yalnizcam area and Aydin's Kocarli District Cakirbeyli area as well as the TV-1 and TV-2 relay stations in Agri's Dogubeyazit District Dalbahce area have become operational."

At 0530 GMT on 21 November, the same radio reports: "The TV-1 relay station in Samsun's Adatepe region, the TV-2 relay station in Malatya's Kocaozlu region, and the TV-3 relay station in Malatya's Hasancelebi region have become operational."

At 2100 GMT on 21 November, the same radio reports: "The TV-1 relay station in Ordu's Kabatas and the TV-1 and TV-2 relay stations in Gumushane's (Kurtun) and Kars' Kazikkaya quarters have been commissioned."